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THE
FUNCTION AND DISEASES
OF THE
UNIMPREGNATED WOMB.



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A
PRACTICAL TREATISE
ON THE
FUNCTION AND DISEASES
OF THE
UNIMPREGNATED WOMB.

ILLUSTRATED BY PLATES, &c.

WITH A CHAPTER ON
LEUCORRHŒA, FLUOR ALBUS, OR 'WEAKNESS.'


BY
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P R E F A C E.

THE intention of the Author of the succeeding Treatise is to present to the profession a condensed account of the more common diseases to which the uterine system is obnoxious.

He has thought right to make a few observations on the function of the unimpregnated womb by way of introduction, and although leucorrhœa or fluor albus is not invariably or even generally the result of disease of this organ, but rather of the vagina, yet from

the frequency of its occurrence, and the obstinacy it sometimes evinces in resisting the ordinary remedial measures, and moreover as this discharge is invariably present at the commencement of the more dangerous uterine affections, he thought it not irrelevant to append a short chapter on its appropriate treatment.

A large portion of the subject matter of the present volume has already appeared before the public in the form of "Lectures," (vide *Lancet* for 1839-40.) These have been published at considerable intervals, and by consequence were necessarily diffused over a large space: this arrangement prevents an easy reference to the various subjects treated of during the progress of the course. The propriety of collecting them together into one volume suggested itself to the mind of the author, and on reflection he felt convinced that by so doing he would be rendering a service at least to the junior members

of the profession. Feeling the force of the aphorism, “μεγα βιβλιον, μεγα κακον,” he has been brief in his observations on each particular disease, although he trusts the description of the several varieties will be found sufficient for all practical purposes.

The author has been for the last seventeen years engaged in the interesting task of communicating information to the aspirants for medical fame; some of the most pleasing and perhaps, he might add, the most profitable hours of his life have been spent with his pupils at the patient's bedside. For the welfare of *these*, his young medical friends, he naturally feels a deep interest, and to *them* he trusts the present volume will prove both serviceable and acceptable. He cannot, however, help indulging a hope that it may be useful as a remembrancer to those who are further advanced in their professional career, and who may not be able to spare the

necessary time for consulting the more voluminous treatises on the important subject of diseases of the uterus.

The drawings, as well as the engravings, were executed with great fidelity by Mr. Perry, from preparations in the possession of the author.

9, FINSBURY SQUARE; 1840.

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DESCRIPTION OF THE PLATES.

PLATE I. represents a bunch of hydatids presenting their usual appearance when expelled from the womb. (p. 114.)

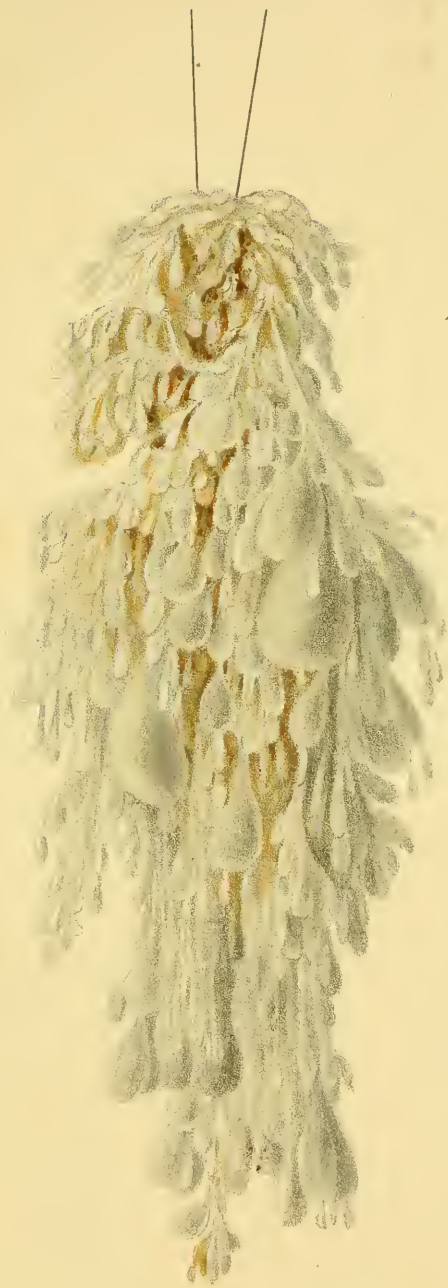
PLATE II. In this plate the hydatids are for the most part imbedded in the substance of the womb: a few may be seen in the cavity protruding the mucous membrane forwards. (p. 115.)

PLATE III. very correctly represents the uterus affected with malignant ulcer. (p. 129.)

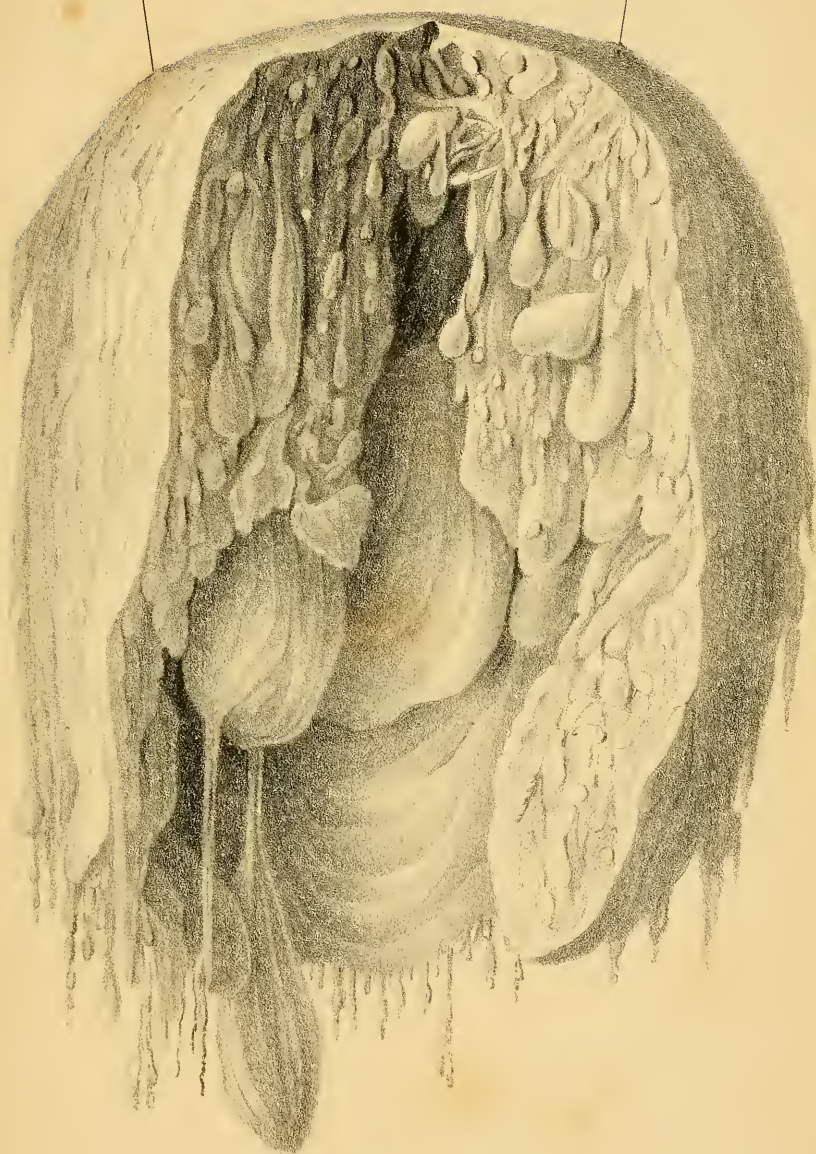
PLATE IV. is a faithful delineation of ulcerated carcinoma. (p. 167.)

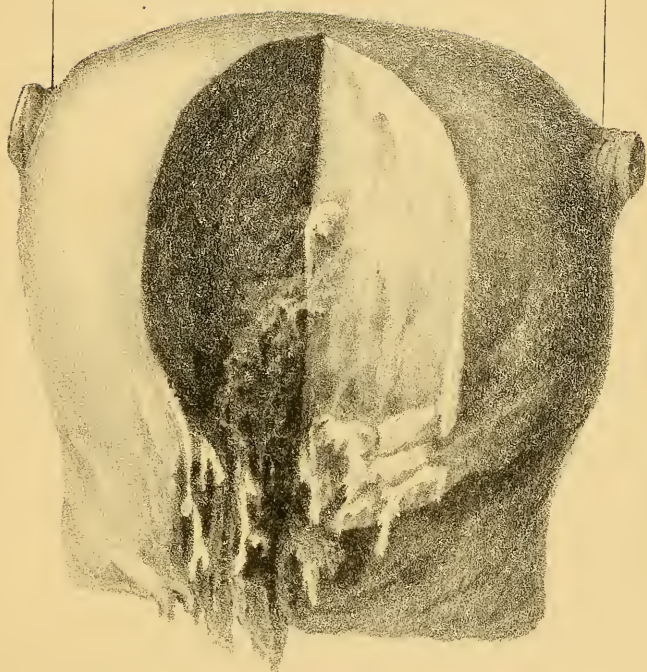
PLATE V. shows a tuberculated womb; the organ itself greatly enlarged, and six tubercles growing from its external surface on the right side. (p. 188.)

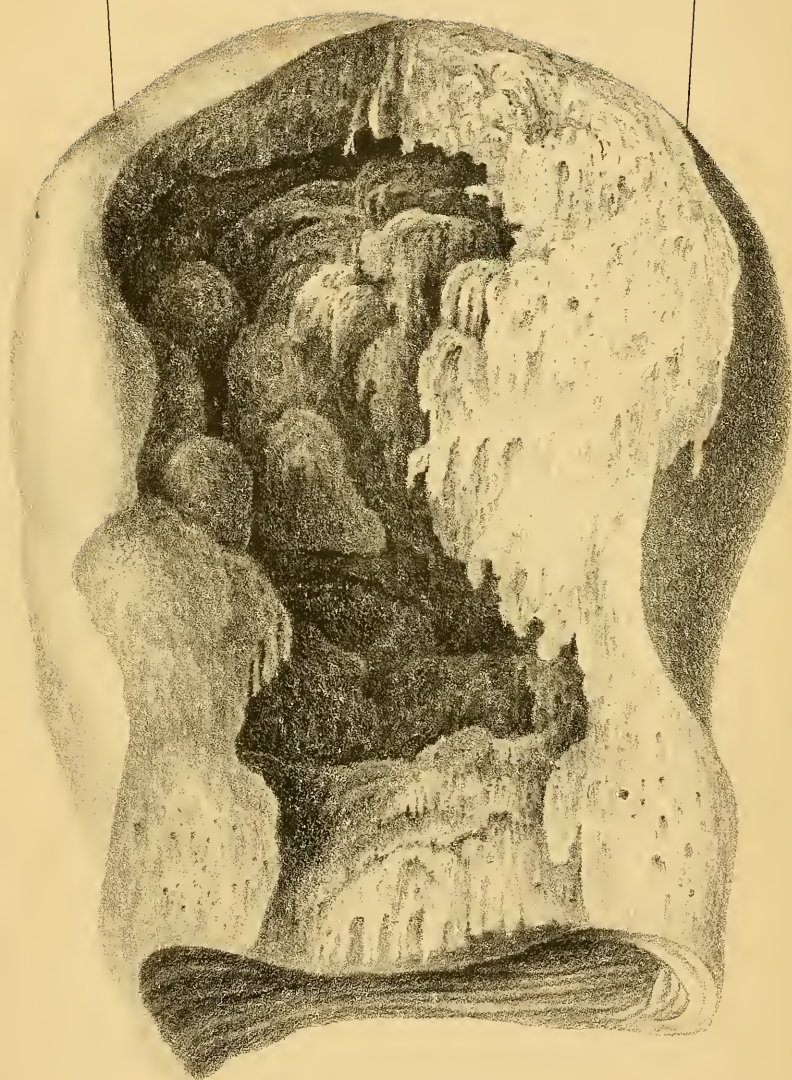
PLATE VI. represents the entire uterus converted into a large tubercle, the texture of which is partly fleshy, partly cartilaginous, and partly osseous. (p. 188.)

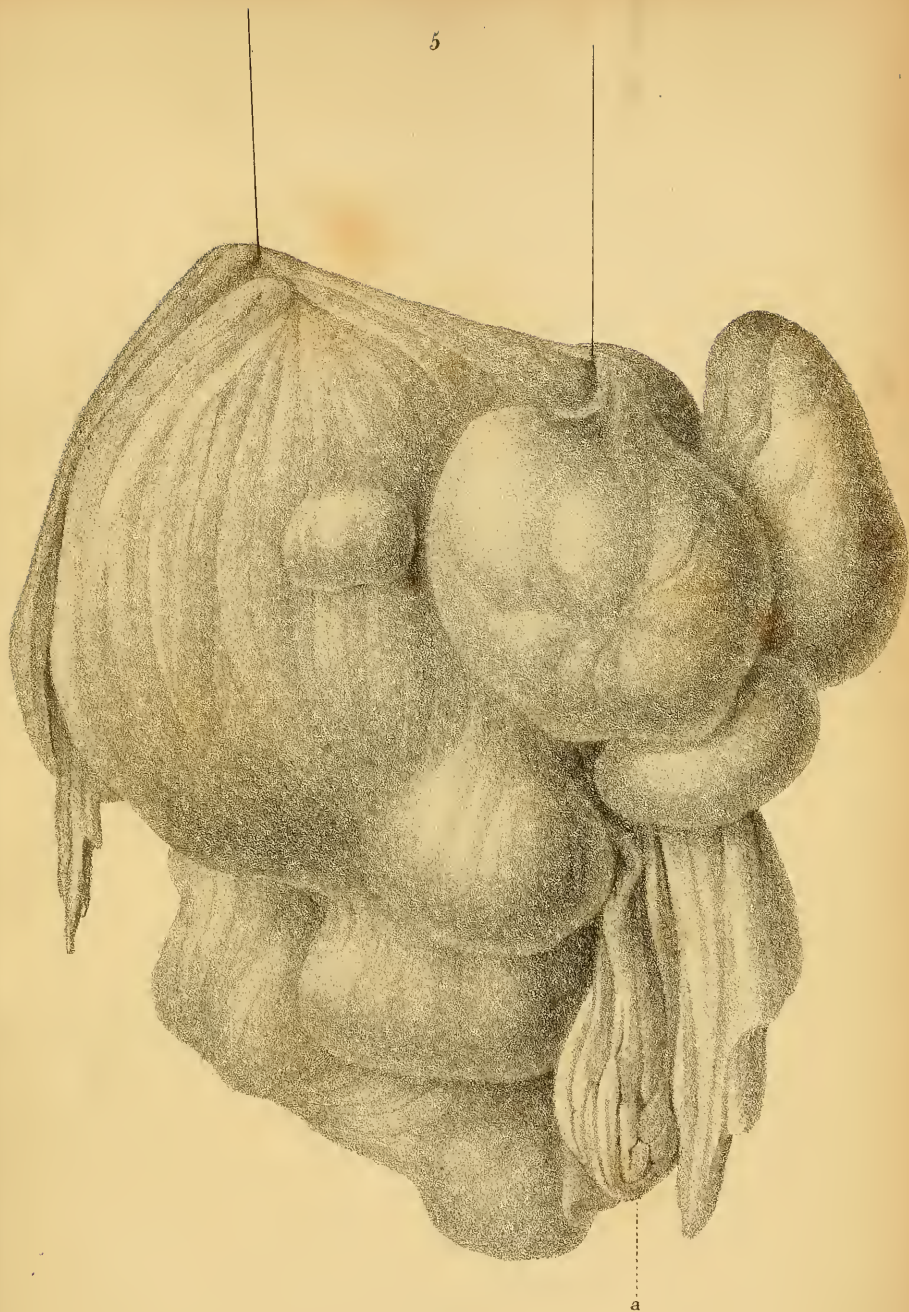


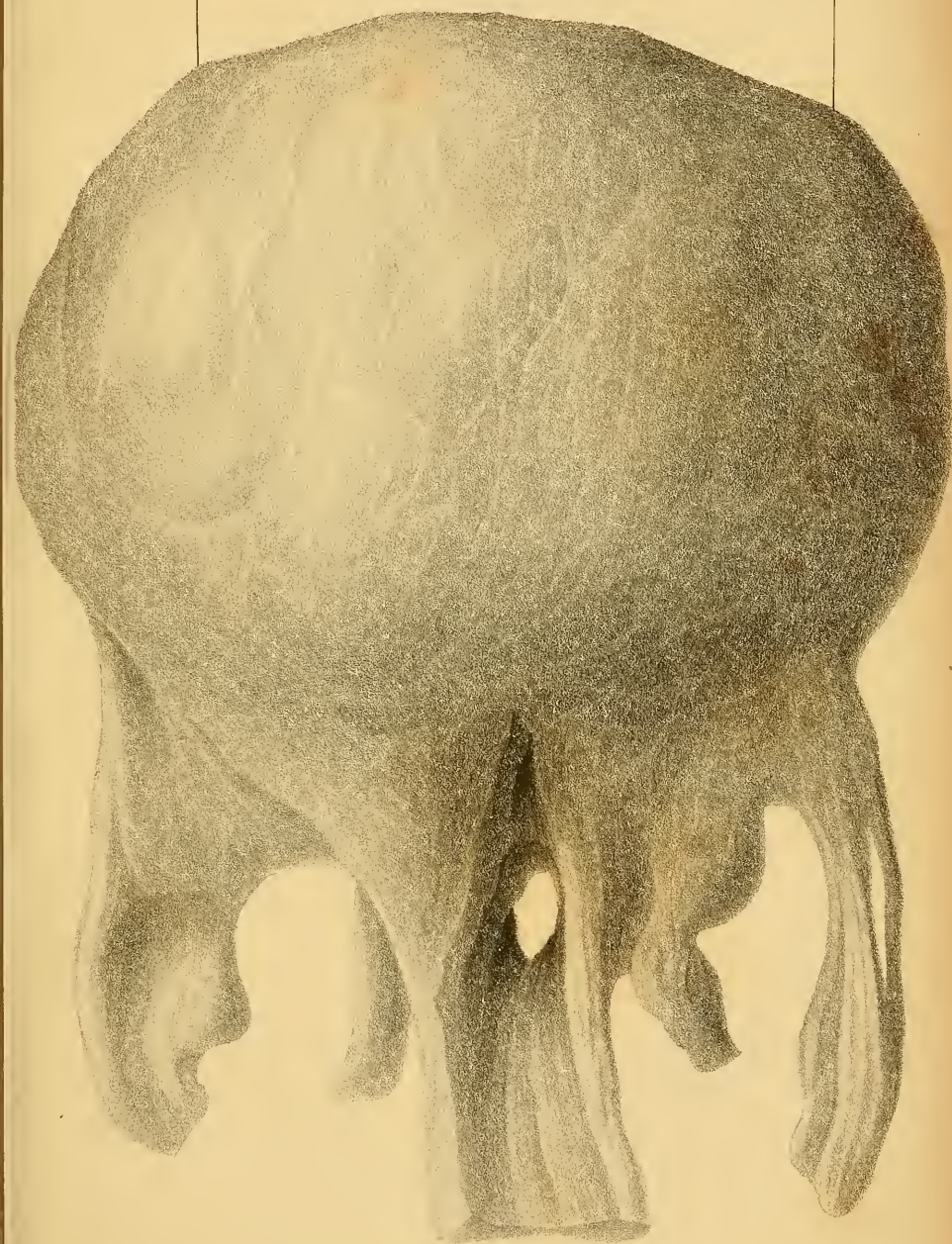
S. Perry del el uchog













A PRACTICAL TREATISE,

&c.

INTRODUCTORY REMARKS.

It may with great truth be asserted that, of all the derangements of function to which the female system is exposed, there are none more common, or which excite more uneasiness in the mind of the patient, than the irregular performance of the uterine at its monthly periods. Nor is this without reason; for although in many instances, perhaps in most, the disturbance of the catamenia is the effect and not the cause, yet the disorders which produce this effect are often of a serious character, proving, if not properly attended to and relieved, not only highly detrimental, but actually destructive to life itself. Hence the necessity of careful investigation respect-

ing the nature of these affections, that the too common error of supposing the uterus to be the only part at fault be not committed. The state of the constitution *generally* as well as that of each individual organ must be examined, or in many instances a cure will not be effected.

As an illustration of the preceding remarks we may select amenorrhœa, or defective menstruation : this is sometimes the simple result of a debilitated condition of the general system ; at other times its cause is distinctly referrible to some particular organ, a diseased action occurring in which deranges the functions of other parts, and that of the uterus amongst the rest.

Again, the opposite condition, namely, menorrhagia, or an immoderate menstrual flow, is often kept up, if not altogether produced, by congestion of the hepatic system, and may therefore be considered as an effort of the *vis medicatrix naturæ* for the purpose of relieving the over-distended vessels of the liver. The absurdity of attending to the uterus alone, without at the same time applying the required remedies for the relief of the original disorder, is too obvious to require more than a passing notice. Immoderate discharges from the uterus are also the invariable concomitants of malignant uterine disease, and may occur under circumstances in

which it would be very undesirable suddenly to suppress them.

The reader's attention will be directed in the succeeding pages,

1st, To the function of the unimpregnated uterus;

2dly, To the disorders of this function;

3dly, To that period of female existence designated the "turn of life;" and

4thly, To the diseases of the womb itself.

THE FUNCTION OF THE UNIMPREGNATED WOMB.

THE womb in its healthy unimpregnated state is one of the most inactive organs in the body, having a solitary function assigned it, the performance of which is required once only in the lunar month, hence its designation, the catamenial or menstrual discharge: this consists in the periodical flow of a dark-coloured red fluid, sanguineous in appearance, and usually recurring with great regularity in females who are neither pregnant or nursing.

When this evacuation first makes its appearance, the female is said to have arrived at the age of puberty, although of this condition Dr. Denman rightly observes, "it is an effect and not a cause." At this period several important changes may be noticed in the development, not only of the organs of generation themselves, but of the bony case by which they are surrounded: the uterus enlarges considerably both in length and breadth, the fissure between the lips of the os uteri is more distinct to the touch, the mons veneris becomes much more developed and covered with hair; its precise size

varies greatly in different individuals; in spare habits it is small, but much larger in those of the opposite condition.

The alæ ilii expand, and with the other parts of the pelvis now assume that particular form which so strikingly characterizes it from the male: prior to this period there is considerable difficulty in distinguishing the sexes from a mere inspection of the pelvic bones. There is also enlargement of the glandular structure of the breasts; instead of being, as heretofore, flaccid and flabby, they become hard and tense.

Not only are these local changes observable, but others also of a more general character; the countenance becoming more animated and expressive, the conversation more intelligent and agreeable, the powers of mind more developed, and the heart agitated by passions and emotions to which it had been previously a stranger. In the description of this circle of changes, Harvey uses the following words: "*Hoc minus notum est, quanta virginea alteratio contingat, increscente primo et tepefacto utero: pubescit nempe, coloratior evadit, mammæ protruberant, pulchrior vultus renidet, splendent oculi, vox canora, incessus, gestus, sermo, omnia decora fiunt.*" (Harvey, *Exercitat. de partu.*) With regard to the voice, however, it may be observed, that the change

is by no means so conspicuous in the female as in the male. Richerand has distinctly shown that this alteration in the voice at the time of puberty depends upon the larynx undergoing an increase in capacity. He states, that in the male the aperture in the glottis augments in the proportion of 5 to 10 in the course of twelve months; that its extent is in fact doubled both in length and breadth, whereas the glottis of the female only enlarges in the proportion of 5 to 7.

The age at which these changes occur is not the same in every person, being under the control of various moral as well as physical causes. The principal agents in retarding or accelerating the period of puberty are the peculiar temperament of the individual, the climate in which she resides, and her mode of life. As a general rule it may be said that residents in the more southern and warmer regions menstruate at a much earlier age than the inhabitants of cold and northern climes; for example, in Greece, the Morea, Java, &c., the discharge often takes place in girls of eight, nine, or ten years old: in Spain, Sicily, and the more southern part of Europe, at the age of twelve years; whilst in Lapland there are no symptoms of the flow until about the eighteenth, nineteenth, or even the twentieth year. In the more temperate climates, as in England, an intermediate period is for the most part observed, menstruation

usually commencing from the fourteenth to the sixteenth year.

Numerous exceptions to this general rule might be adduced without any inconvenience being experienced. Dr. Wall relates a case in the *Medico-Chirurgical Transactions*, of singular precocity in a female infant, where the menstrual flow appeared at the early age of nine months: on the other hand, the author has met with instances where there was no appearance of the catamenia until nearly the twentieth year. This difference in the time of life at which puberty takes place has been assigned by the historian Hume as the reason why women in hot climates are so very commonly treated as slaves, and why on the contrary their influence is so extensive in the colder regions: it may be said that in the former, woman is in the zenith of her beauty whilst a mere child in understanding, and long before her intellect is matured she ceases to be an object of love, the fact being the very reverse as regards the latter.

The climate, manner of living, and peculiar constitution of the female, appear also to have a manifest influence on the *quantity* of the secreted fluid, although it must be admitted that in this respect there are great variations in women of the same country, and even in the same individual at different

times. In warm climates the quantity is generally large, in the cold regions it is small, and in our own land it observes a mean between the two, the average amount being about six ounces. Should, however, the female live luxuriously, or confine herself to a warmer apartment than ordinary, the quantity will be greatly increased.

The menstrual discharge is usually completed in a period of time varying from three to six days: here again great variations are to be noticed; some females menstruate for one day only, whilst in others ten, twelve, or even fourteen days may elapse before the flow ceases. Its periodical return is in some marked by great regularity, not only as regards the day, but sometimes almost the hour. In others on the contrary this punctuality does not exist, the discharge commencing a week earlier or a week later than its natural and proper time, and this may occur without necessarily inducing any feeling of uneasiness.

The final cessation of the function of menstruation is regulated by the period of time at which it commences, as it commonly continues for the space of about thirty years; consequently, if menstruation begins about the fourteenth or fifteenth year, it terminates about the forty-fourth or forty-fifth year, and after this has taken place conception cannot

occur. From this fact it will be noticed that the process of child-bearing is wisely confined to the most vigorous period of female existence.

Arterial plethora is said to be the cause of this secretion; it ceases when venous plethora commences. Its use appears to be that of preserving the uterus in a fit state for impregnation; at any rate it is well known that the due and healthy performance of this function indicates the capability of conception; and as a general rule it may be stated that females whose menstrual action is disturbed rarely conceive. There are nevertheless many exceptions to this statement. Two cases have come under the immediate notice of the author, wherein conception preceded menstruation: the age of one of these females was sixteen, that of the other barely fourteen. Again, there are numerous instances in which women have become pregnant immediately after marriage, although the function of menstruation had previously been performed with great irregularity. Notwithstanding all this, however, these may still be regarded as exceptions, or deviations from the ordinary course of nature's proceedings.

In cases of obstructed menstruation, vicarious discharges of blood occasionally take place from various parts of the body: this has been especially

observed in those who are the subject of ulcerated legs, for at the time when the menses ought naturally to appear, the sore inflames, and a little blood is seen to distil from its surface: in short, all diseased parts seem to have their symptoms aggravated at this time; this probably arising from increased turgescence of their blood-vessels: the irritability of the nervous system is also greatly increased.

Menstruation is seldom completely established without the supervention of many unpleasant symptoms. There is, for example, a feeling of languor and lassitude; headach, dull, heavy pains in the loins, hips, and region of the uterus, extending to the upper and inner parts of the thighs; the stomach is sympathetically affected, the appetite bad, and the bowels confined. Nervous and hysterical affections frequently prevail. After a longer or shorter continuance of some or all the above-named symptoms, a pale mucous discharge exudes from the vagina: this in some instances is slightly coloured, but seldom assumes its sanguineous appearance until after several monthly periods. When the secretion is thoroughly established, and this will be known by its passing away in proper quantity and of a red colour, these painful affections generally subside, although in some females they recur with great violence, and most pertinacious regularity, throughout the whole term of menstruation, and, as has

been previously observed, these females rarely conceive.

The *discharge* is peculiar to the human female, none of the lower orders of animals being subject to it. If, however, their genital organs be examined, it will be seen that at certain periods there is a great increase in their vascularity: the common domestic rabbit affords a good illustration of this fact.

The lining membrane of the uterus is the source whence it flows, from the vessels of which it is clearly a secretion; for, notwithstanding its bloody appearance, it is destitute of the coagulating principle, and appears to have the power of resisting the putrefactive process for a lengthened period of time. In cases of imperforate hymen, where the fluid has been shut up within the cavity of the uterus for months or even for years, no *clot* has been detected, although some alteration in consistence is observable, for it becomes inspissated, and somewhat resembles treacle. A doubt formerly existed regarding the part which furnished the secretion, whether the membrane of the womb or that of the vagina was employed in this office. This doubt has, however, been unequivocally set at rest; for in cases of recent *inversio uteri* it has been seen to ooze from the uterine membrane

itself: the same fact has also been noticed in the dissection of females who have suddenly died whilst menstruating. Dr. Blundell had once an opportunity of seeing the discharge drop through the os uteri in a severe case of procidentia.

An opinion, altogether unfounded in fact, was entertained by many of the older medical writers that the menstrual fluid possessed properties of a malignant nature. This notion probably owed its origin to the severe regulations enforced under the Jewish dispensation respecting the conduct of women at this particular time. The discharge seems to be as innocuous as any of the other secretions of the body, and therefore we cannot agree in opinion with De Graaf, who, in reference to this subject, expresses himself in the following words :

“*Penis cum menstruata concumbentis excoariatur, si novella vitis eo tangatur, in perpetuum læditur, steriles fiunt tactæ fruges, moriuntur insita, exuruntur hortorum germina; si mulier pregnans alterius menstrua supergrediatur, aut illis circumlinatur, abortum facit; ei autem, quæ uterum non gestat, concipiendi spem adimit; purgantis spiritus, et vapor ab ore, specula atque eboris nitorem obscurat: gustatus hic sanguis canes in rabiem agit, homines vero diris cruciatibus affligit, comitalem morbum, pilorum effluvium, aliaque elephantiorum*

vitia: idcirco a veteribus inter venena relatus; pari malignitate existimatur, atque sanguinis elephantici potus." (p. cxxiv.)

In consequence of the monthly return of the evacuation, some physiologists have imagined that the influence of the moon was in some way or other concerned in its production. The celebrated Dr. Mead entertained this opinion, for he states that the catamenia, as well as the tides, are equally the subject of lunar influence. This theory is too absurd to require any lengthened refutation: one objection alone, but that an unanswerable one, will be mentioned, viz., that different women are found menstruating every day throughout the month, whereas, had the secretion been the consequence of lunar influence, it might naturally enough be expected to take place not only on the same day, but at the same hour in all. Just previously to and at the commencement of menstruation, the womb is greatly augmented in size, and this may easily be accounted for by the increased quantity of blood which is then determined to the organ for the purpose of its secretion. Dr. Blundell had once an opportunity of witnessing this in a case of procidentia. He says, "the increase took place regularly, and the whole womb might distinctly be felt to throb; and hence," adds the doctor, "we may reasonably infer that whatever may, month by month, be the cause of the

topical increase of the vascular action in the menstruating vessels, it is the determination of the blood on the uterus, produced by this topical excitement of the vessel, that gives rise to the discharge. When women are led from disease of the pelvis to examine the uterus, they sometimes imagine it to be larger at that time, or immediately before." We may also remark in conclusion, that the breasts are often sympathetically affected; there is distinct enlargement with a greater degree of firmness, not always unattended with pain. The menstrual flow has, in popular language, received various designations, such as *the courses*, *the terms*, *the flowers*, *the change*, &c. &c. More commonly, however, females during the period call themselves *unwell*, or *out of order*, or perhaps they will express themselves by saying, they have not seen *them* since such a time, or *they* have been on me for a longer space than usual. The young practitioner should always be aware of the meaning of this mode of expression, or the patient will have a poor opinion respecting his knowledge of female disorders. In the preceding pages the reader's attention has been directed to the function of the unimpregnated womb: the various circumstances connected with its healthy action having been described, we shall in the next place proceed with the consideration of its disordered conditions.

THE DISORDERS OF THE MENSTRUAL
FUNCTION.

ALTHOUGH in many women the function of the uterus is performed with great order and regularity throughout the menstrual period of their existence, yet in others (and these instances are by no means few) great deviations from its natural and healthy action take place. For example, there may be an entire absence of the flow, constituting the disorder *amenorrhœa*, or there may be excess in the quantity effused, *menorrhagia*; or, thirdly, the secretion though regular as to time, may nevertheless be attended with pain and difficulty, *dysmenorrhœa*. These three varieties of disturbed menstruation must be examined in detail, when it will be found that they are seldom idiopathic affections, but commonly depend upon some morbid condition of the general system, and consequently unless *this* be attended to, no attempts to rectify the catamenial flow will prove availing.

AMENORRHŒA.

*Emansio Mensium, Obstruction, Retention,
Suppression, Chlorosis.*

The term amenorrhœa is generic, and comprehends two distinct orders of disordered menstruation: first, those cases in which the discharge has never appeared, and this is called emansio, retention, or obstruction; in other cases the flow becomes interrupted after it has been regularly continued for months, or it may be for years, and then it is characterized by the term suppression. In the first variety the menstrual action has never been established, whilst in the second there is a stoppage after it has been for some time duly performed.

Emansio Mensium.

The causes producing this disorder are twofold: it may arise from imperfect organization, or as is most frequently the case, it may be traced to a constitutional origin. The genital organs may be but imperfectly developed; thus the uterus, with its appendages the ovaries, may be of very diminutive size, or may be altogether wanting, and to these defects the

non-appearance of the menstrual flow may be attributed. A tolerably accurate opinion of such condition of parts may be formed by observing certain appearances connected with the female herself, for in these individuals the usual changes marking the period of puberty do not take place, either in the uterus, external organs, or in the mammæ; there are no sexual appetites, the female at the age of twenty or even thirty years, appearing, when compared with others of equal age, to be a mere child. *Emansio mensium* from this cause must of necessity be irremediable. Again, the *catamenia* may fail in making their appearance in consequence of another defect, viz., obstruction of the vaginal or uterine orifice. The uterus itself is not often closed, although the passage leading to it may be completely obstructed from imperforation of the hymen, a membrane which stretches across the canal, having in its natural condition a central opening: under these circumstances, the fluid secreted by the inner membrane of the womb is prevented from escaping, and will therefore be detained in its cavity. Some obscurity will arise unless the case be thoroughly investigated, as the symptoms may be confounded with those of pregnancy. No inconvenience will be experienced until the age of puberty, because the uterine function is not previously established: at this time, however, pains are felt in the breasts, loins, and lower parts of the abdomen, and these pains return

periodically. If the girl be of a spare habit, the fluid will be secreted in small quantities, and therefore the defect may remain undiscovered for many months, perhaps for years. Even in a strong healthy female the quantity is so small that no inconvenience will be experienced at the first, and it is probable that a medical man will not be consulted until the womb becomes considerably distended.

At length the uterus increases in size, and the accumulated fluid, pressing down behind the hymen, protrudes the vagina, upon which small specks of ulceration are occasionally discernible. The enlarged womb may also be stimulated to contraction; and if the practitioner make his *first* examination at this time he will probably not only imagine his patient pregnant but actually in labour—the protruded and tense state of the hymen conveying the same sensation to the touch as the bag which contains the fœtus and liquor amnii. If his finger be retained in the vagina until the uterine action has subsided, the mistake will be at once rectified; for on endeavouring to pass the finger onward, for the purpose of ascertaining the condition of the os uteri, its progress will be resisted, or rather altogether obstructed, the vaginal canal being shut up by the imperforate membrane.

Such a state of parts as that just described is

easily remedied by incision ; and for this purpose a scalpel is the best instrument, decidedly superior to the trocar which has been recommended by some, as the intention of the operation is not simply the removal of the fluid, but that space may be afforded for sexual intercourse. When about to perform the operation, the female is to be placed upon her back on a table of convenient height, with her thighs separated and her knees bent upwards towards the abdomen, the position being similar to that in which surgeons place their patients when they operate for the stone. Most writers recommend a crucial incision to be made, the membrane being first divided longitudinally and then transversely. The author, however, is of opinion that a *free* longitudinal division of the hymen is all that is required. In a case he lately attended, in conjunction with Mr. Dunn of the Strand, where the orifice of the vagina was closed up, the woman being in strong labour, a longitudinal section was made, after which the parts dilated sufficiently to allow the child to escape without difficulty. When the opening has been made, pressure is to be made upon the abdominal parietes with a tolerable degree of force, that the uterus may be completely emptied of its contents ; and the operation is finished by the injection of tepid chamomile tea into the womb. The fluid evacuated has usually the consistence of thick cream or thin

treacle: the longer it has been detained the more dense it becomes. It should be remembered that this fluid never coagulates and seldom acquires an offensive smell. Great attention should be paid during the healing process, to prevent the divided edges uniting by adhesion: this is readily effected by the introduction of pledgets or tents of sufficient size.

Should the os uteri be closed, a somewhat similar operation will be required. The author never met with a case of complete occlusion of this part but once, and that was at the time of labour: the womb ruptured, and the unfortunate female lost her life.

A curious case of retention occurred in the practice of the author some years ago. The lady was about thirty-two years old, married, but had never menstruated. She had the usual sexual appetites in rather a lively degree. The organs of generation were examined with great care, and both the external and internal seemed to be fully, and indeed rather largely, developed. The precise nature of this case is involved in considerable obscurity. The fully-developed condition of the generative organs and the presence of sexual desire prove the existence of the ovaries; for it is well known that where these bodies are defective, or imperfectly

formed, there is always the absence of sexual desire. It may further be remarked that the tone of voice in this person was masculine, and there were also short hairs growing on her upper lip, which somewhat resembled the beard of a man.

Organic defects, however, are rarely to be met with in the female organs of generation. Imperfect menstruation is generally the result of other causes, which we shall now proceed to describe.

The most common condition of the general system in those who are the subject of *emansio mensium* is that which is called chlorotic. This word is derived from *χλωρος*, *viridis*, and is applied more particularly to those cases where, from a deficiency of red blood in the circulating system, the skin becomes pallid, and assumes a yellowish-green tint, and hence its popular appellation "the green sickness." These patients complain of weariness and languor: there is disinclination to move about, a slight degree of muscular motion produces great debility and exhaustion; the pulse is small, frequent, and irritable; the tongue pale; pains are complained of in various parts of the body, more especially in the head, chest, and *scrobiculus cordis*.

The secretions are universally deranged, the ap-

petite is bad, and the bowels constipated: palpitation of the heart, difficulty of breathing, and a teasing cough, are the results of slight exertion; the countenance exhibits in a marked degree the deficiency of the red particles of the blood, the cheeks becoming sallow and the lips pale; swelling of the lower limbs, especially towards evening, is also a frequent symptom.

In many cases there is cough, difficulty in breathing, with occasional nightly perspirations, and hence mistakes have been committed, the female having been supposed labouring *under*, and erroneously treated *for* pulmonary disease. A little consideration will discover the true nature of the disorder, for although the symptoms just enumerated to a certain extent resemble incipient phthisis, yet it is well known they are also the effect of a defective supply of blood; these different causes, which are producing the same results, may be readily distinguished from each other. In chlorosis a full inspiration is not attended with uneasiness, exposure to a cold atmosphere excites no disposition to cough, there is little or no expectoration, a constipated state of bowels, a disinclination to take food, and the spirits invariably depressed. In these particulars chlorosis differs materially from incipient consumption; another distinguishing character of the former may be added, viz., that hysterical symp-

toms are generally present. The distinction between the two diseases is very important, for the treatment required in the one would be productive of serious mischief if employed in the other.

A female may not menstruate at the usual age of fifteen or sixteen years, and yet there may be nothing radically wrong in her constitution. Some do not arrive at puberty so soon as others, but suffer no inconvenience on this account. It ought not therefore to be hastily inferred, that because the secretion does not appear, there must of *necessity* be some defect, either of the system *generally*, or of the generative organs *particularly*.

Treatment of Chlorosis.

Upon a considerate review of the symptoms already enumerated, it is evident that the non-appearance of the menstrual discharge is not *the disease*, but a mere effect, in common with many others, of an impoverished state of the system. The indication to be fulfilled therefore is not to force the evacuation, but to alter and amend the constitution, which is in too languid a condition to support its usual functions, and consequently quite unable to take on a new action. The bowels should be thoroughly emptied in the first place, and their

regular action afterwards secured by the occasional use of laxatives. From five to ten grains of pilul. rhei compos. will answer the purpose exceedingly well: its action is mild, and will not increase the symptoms of debility already present, and on this account is more serviceable than saline or any other more powerful aperients. Some have advised the exhibition of an emetic at the commencement of the remedial plan; to this as a general rule we have a decided objection, believing it in most cases to be unnecessary, although in certain cases it will be useful; in those for instance where there is constant nausea with *disposition* to vomit, but nothing ejected. The preparations of antimony or ipecacuanha are inadmissible in consequence of their depressing effects. The following draught may be prescribed:

R. Zinci sulphat., gr. xxv.
Aquæ tepid., ℥j. Solve.

The most powerful tonics are next required; amongst which, the different preparations of iron have long been held in deserved repute. The form in which this remedy is employed may be varied according to the patient's inclination, some preferring a liquid, *mistura ferri comp.*, *tinct. ferri muriat.*, *ferri acet.*,—the latter is the most agreeable of all the liquid preparations. The *sesqui-oxyd of iron* may be used in powder, or if a pill be preferred, *pil.*

ferri compos. In the dispensary to which the author is attached, a very simple form of steel pill is prepared, consisting of a single grain of the sulphate of iron made into the proper pilular consistence with extract of gentian: one of these pills may be taken thrice or four times a day where this remedy is indicated. This is a very efficient form in which iron may be administered, and in dispensary practice there is a further advantage, viz., that it is very economical.

The vegetable bitters are sometimes of great service, and where iron disagrees with the stomach they may be used with advantage: either calumba, cascarilla, gentian, or cinchona should be selected according to the judgment of the practitioner.

The author has in many instances witnessed good effects from the following combination of quina with capsicum:

R. Quinæ disulphat, gr. ij. ad gr. v.
Pulv capsici annui, gr. iij. ad gr. viij.
Ext. gentian. q. s. ut f. pilul. iij.
Hor. j. ante cibos. sumend.

The medicine appears to excite a more lively and healthy action in the lining membrane of the stomach, producing a greater and a better secretion of gastric juice, and thus materially aiding the process of digestion. A small dose of mercury (not

more than a single grain of blue pill) given every night, will assist the cure by improving the state of the secretions generally. The effect of mercury must be narrowly watched, as it should be immediately discontinued if the irritability of the system is increased by its use.

Some discretion is required with regard to exercise. It is popularly believed that strong muscular efforts are of peculiar service; but this is by no means correct: it is useless, nay it is decidedly cruel, to enforce active exertions before the constitution has in some degree recovered its tone, and when this object has been attained, the girl loses the disinclination to move about, and will then take as much exercise as is necessary. My general advice to patients is, that no active efforts should be employed if attended with feelings of fatigue and exhaustion; the amount of muscular motion is therefore entirely regulated by their own feelings.

The regimen should correspond with the remedial plan already recommended; a generous diet is required, care being at the same time observed that food be taken in small quantities, so as to prevent the stomach becoming at any time uneasy from distension. In addition to nutritive food it will be necessary to allow a certain portion of stimulating drink, either wine, ale, or Dublin stout,—the latter

in most cases is to be selected in preference to the two former : whatever fluid be decided on, greater benefit will be derived if it be taken, not *with* the meal, but an hour or two afterwards.

If the nights are sleepless, an anodyne, consisting of the combination of hyoscyamus with poppy, may be prescribed at bed-time :

R. Tinct. hyoscy. syr. papav. āā 3 j. Mist. camp. 3 x. M. f. haustus.

Opium should not be employed, as it has a tendency to interfere with the secretions necessary for the completion of the digestive function. In by far the greater number of cases anodynes are not required : the symptoms are those of heaviness and torpor rather than watchfulness and indisposition to sleep.

Now and then there is a very irritable state of the intestinal canal, the bowels instead of being constipated are relaxed ; it is right to attend to these symptoms immediately, or the general debility will be greatly increased by their continuance ; relief is soon obtained from the subjoined prescription :

R. Sodæ potassio-tart.
Syr. papav. āā 3 j.
Aq. menthæ pip. 3 x. f. haustus 4tis horis sumend.

R. Hydr. c. creta, gr. v.
Pulv. ipecac. co., gr. viij. ft. pulvis. Omni nocte sumend.

Where acidity of stomach prevails, ten or fifteen grains of sodæ sesquicarb. may be added to each draught.

With regard to diet in these cases, it is scarcely necessary to observe, that those articles should be selected which have the least tendency to undergo the acetous fermentation ; the use of vegetables and every kind of fermented liquor should be interdicted ; the best drink is soda-water with an excess of alkali, and the occasional addition of two or three teaspoonfuls of brandy.

A flannel dress greatly contributes to the comfort of the patient, as she usually feels cold ; it tends also to encourage the cutaneous circulation, and thereby affords relief. The tepid sea-water bath followed by friction with flannels, and in short everything which rouses the system from its atonic and torpid condition, may advantageously be had recourse to. The cure of this malady, although in many instances protracted, is nevertheless in general certain.

When the remedies are successful more blood will be formed, and the effects soon manifest themselves : the countenance no longer presents a pale, sickly appearance ; the lips lose the peculiar leaden hue which previously existed and become florid ; the

eye brightens ; the dyspnœa and cough are relieved. If at this time nature appears to be making an attempt to bring on the discharge, and this will be indicated by uneasiness, weight, and sometimes decided pain in the loins and region of the womb, it is right to endeavour to assist her by the use of the hip-bath. The reader is earnestly implored not so far to forget rational principle as to be induced to have recourse to that empirical practice which consists in the administration of those stimulating and forcing remedies called emmenagogues.

If the view we have taken of the nature of the complaint be correct, the absence of menstruation is to be considered a symptomatic affection, and not an original disease, the fault resting with the general system and not with the uterus in particular; indeed it may be considered rather as a merciful provision of nature, that in such an impoverished state of constitution this drain should not be established. When recovery of the general health takes place, the uterus will perform its proper function in common with the other organs of the body.

From the natural diffidence and modesty of the female sex, the medical man is seldom applied to sufficiently early, and the opportunity thus afforded has been eagerly laid hold of by quacks and charlatans, who by their bold and impudent assertions,

and their unprincipled and flagrant violations of truth, have succeeded but too well in their attempts to deceive; and the poor unfortunate chlorotic, by her easy credulity, exposes herself to months of suffering, from which she might have been relieved by proper medical advice.

In conclusion, we may observe that there are no cases which more evidently and decidedly evince the superiority of correct and proper treatment than those of chlorosis. A patient applies for relief in a debilitated and emaciated condition, a trouble to herself and all around her, probably half starved, and nearly poisoned by digitalis, under the supposition of a commencing consumption. By tonic remedies and generous diet the system becomes invigorated, and the distressing symptoms vanish. Many cases of this nature have come under the immediate observation of the author.

Emansio Mensium attended with Plethora.

Although obstruction of the menstrual flow is very generally dependent upon a chlorotic state of constitution, yet it will now and then be found (though these instances are rare) that this interruption is occasioned by the opposite condition, the

system being in a state of plethora, the blood-vessels instead of being too empty are too full.

The symptoms differ so essentially that an error is not likely to be committed; they are in fact just the reverse of those which have already passed under our review. The general appearance of the patient at once indicates her condition: the face is flushed instead of being pale and sallow, the pulse beats with force and is not inordinately accelerated; there is often intense headach, thirst, dryness and heat of skin, a furred tongue with diminution of all the secretions, the urine especially is scanty and deep-coloured; indeed all the common marks of febrile disturbance are present, and these may affect the patient periodically, perhaps once in about every four weeks.

It is hardly necessary to observe that the treatment which is required for the cure of this kind of obstruction differs greatly from that of chlorosis; the plan, indeed, is exceedingly simple: the single indication to be fulfilled is to reduce vascular action, and this is effected first by *venesection*: blood should be removed from the arm in small quantities (from four to eight ounces will be sufficient), and the bleeding should be repeated every four weeks. If it be ascertained upon examination that there is determination of blood to any particular organ, cup-

ping-glasses may be applied in the neighbourhood of the part; in some instances probably, it will be more advisable to apply a sufficient number of leeches.

Secondly, *by purgation*. As the intention here is not only to empty the bowels, but at the same time to lower the system, those purgatives are to be selected, which, by acting upon the mucous membrane of the bowels, produce copious liquid evacuations; for this purpose one or two drachms of magnesiæ sulphat., dissolved in infus. rosæ, and given either twice or thrice daily as circumstances may require, will be found to be very effective.

Thirdly, *by spare diet*. It is quite clear that no benefit can be expected from the mode of treatment now under consideration, if full nourishment were allowed at the same time: the plan must be carried out by restricting the patient to diet which is not very nutritious, and she should also be recommended to take small quantities at a time. Animal food for the most part is to be abstained from, and all stimulating beverage avoided.

By these three methods, viz., by venesection, purgation, and spare diet, the plethora will be overcome, sometimes in a longer, sometimes in a shorter period of time: the natural and healthy balance of

the circulation having been restored, the appearance of the catamenial secretion may be reasonably expected. The use of stimulating emmenagogue medicines can in nowise be justified, as the non-appearance of the discharge is the result of an action of the menstrual vessels, very analogous if not actually amounting to inflammation. The hip-bath may be added to the list of remedies already enumerated, but this should not be employed until the increased vascular action has been subdued.

SUPPRESSION OF THE MENSTRUAL FLOW.

THE catamenial discharge is sometimes suddenly suppressed *during its flow*; at other times, causes operating during the interval prevent its recurrence; or thirdly, it may be arrested, or rather retained, in consequence of a debilitated state of the system, similar to that already described, when speaking of *emansio mensium*, and to these latter cases the designation of adult chlorosis has been not improperly applied.

The menses may be suddenly suppressed by any powerful mental emotion, e. g. excessive grief, terror, joy, &c. In a majority of cases, however, the interruption of the secretion is to be referred to external causes, especially exposure to cold in combination with moisture: it is a well-known fact, that if a female get wet in the feet during her monthly periods, *suppressio mensium* is a very common occurrence (instances of this nature are met with almost daily), and hence the reason why servant girls, whose avocations subject them to such exposure, are such frequent sufferers from this affection.

From whatever cause sudden suppression may

have been induced, its attendant symptoms are commonly of an active or inflammatory character ; sharp pains are felt in the hips, loins, and region of the uterus ; there is increased vascular activity, marked by frequency and force in the arterial circulation ; determination of blood to the head is also indicated by throbbing pains, attended with powerful pulsations of the carotid and temporal arteries. There is dryness and heat of skin, the tongue is furred, the urine scanty and high coloured, indeed all the secretions are diminished. There is often palpitation of the heart, a sensation of choking in the throat, (globus hystericus), with other symptoms of an hysterical nature. The cerebral symptoms are sometimes so urgent, that temporary derangement is the consequence ; these cases are however rarely met with ; nausea and vomiting are also occasionally present in this variety of suppressed catamenial secretion.

Treatment of Sudden Suppression.

From the symptoms already enumerated as attendant upon this disorder, it will be evident that it must be treated upon the antiphlogistic plan. Venesection is the first remedy required. The quantity of blood drawn away to be regulated by

the violence of the febrile symptoms on the one hand, and the general constitution of the patient on the other. If she be of full habit, and rigid muscular fibre, from twelve to sixteen ounces may be taken from the arm, the operation to be repeated or not according to circumstances. If the action of the heart and arteries be somewhat reduced, but not to a sufficient degree, a smaller bleeding will be necessary, either from the arm or by the application of cupping-glasses to the loins. The circulation must also be lowered by exhibiting saline purgatives freely. Relief is frequently obtained from medicines which promote determination to the skin,

R. Liq. am. acetat., 3 iij.
Syrup. papav., 3 ss.
Liq. antim. tart. ℥. xxv.
Mist. camphor. 3 j.
Pro haustu quartis horis sumendo.

The warm bath used at the same time will greatly assist the action of diaphoretic remedies. Great care should be taken, on the one hand, to avoid exposure to cold; at the same time it should be remembered, that excessive heat tends to increase vascular action, and is on that account positively injurious; a mean temperature is therefore to be preferred; but little nourishment and no stimulating beverage should be permitted.

If obstruction occur at the *commencement* of a

monthly period, and the proper treatment be promptly put into practice, the discharge *may be* reproduced. More frequently it will not appear until the next month; and where the case has been neglected, several months will elapse before the constitution is restored to that healthy condition which will enable the uterus to perform its function with regularity.

When menstruation is thus suddenly suppressed, it is not uncommon to have vicarious discharges of blood from other organs of the body; there may be epistaxis, hæmatemesis, or sometimes hemorrhage to a considerable extent from the rectum. The danger under these circumstances necessarily depends upon the quantity of blood effused; if it be small, the general plan of treatment is to be persisted in without reference to this particular symptom; if it be large, astringents and styptics are to be employed.

Should month after month pass away without the restoration of the secretion, it will in all probability be found that other organs besides the womb are disordered, and these will then require particular attention.

Suppression from causes which operate in the interval between the menstrual periods.

The menstrual discharge is sometimes suppressed, not *during the flow*, in the sudden manner which has been described, but as the result of causes operating during the interval. When the general health is suffering from any debilitating affection, the evacuation is frequently absent; and here we would quote a sentence from Burns, who, in his valuable work *On the Principles and Practice of Midwifery*, most justly observes, "the effect is often mistaken for the cause, the bad health being attributed to the absence of the menses; and much harm is frequently done by the administration of stimulating medicines. In them the irregularity of the menses is symptomatic, and generally indicates considerable debility, induced perhaps by great fatigue, bad diet, loss of blood, or long-continued serous discharge, hectic fever, and dyspepsia."

Let it not, however, be imagined, that the author is claiming for the menstruating membrane of the womb a total exemption from disease. It is without doubt sometimes the original seat of the disorder which interferes with its function. Debility of this part is sometimes induced by too frequent sexual intercourse. Again, it is liable to a peculiar

action of the vessels, similar to that which takes place in the vagina in leucorrhœa, and then, instead of the regular monthly flow, a white mucous discharge is constantly exuding; or there may be chronic inflammation of the membrane itself. In all these cases, *suppressio mensium* is obviously the direct effect produced, and to the uterus the remedies must be applied.

The primary indication in the cure of this form of the disorder is however still the same, namely, not so much to *force* the evacuation, as to alter that morbid action of vessels to which suppression owes its origin. Great care is required in investigating the state of health in general, as well as the particular condition of the uterus. The seat of the disorder having been determined, the next enquiry will consist in ascertaining whether there be general or local plethora, or general and topical debility; and according to the existence of one or other of these states, the selection of remedies must depend: in other words, whether the patient is to be treated upon the antiphlogistic or tonic plan. I entertain a very decided opinion that the medicines called emmenagogues would scarcely, perhaps never, be employed, if the symptoms of disordered menstruation were more generally traced to their cause.

This subject must not be wholly dismissed with-

out a few words respecting the use of mercury, as it is a remedy which has been frequently highly extolled as an emmenagogue. There can be no objection to the use of mercurials in certain cases under proper restrictions, namely, where they are required for the relief of a disordered condition, either of the uterus or of any other organ. It sometimes produces a beneficial effect, but it does so indirectly; in other words, it does not act as a direct stimulus to the womb, but it alters the action of the menstruating vessels, and thus accomplishes the grand primary indication before mentioned. A great variety of remedies have been recommended from time to time as local stimulants: the consideration of these will not be entered into, as a long and tolerably extensive practice in these affections fully warrants the author in expressing his disapprobation of this mode of treatment, believing, as he does, that all stimulants applied directly to the womb are improper, whether in the form of internal medicines, injections (liq. ammoniæ in milk), electricity, or otherwise.

We would notice, in conclusion, that the absence of the catamenia is not always the result of disordered action. In pregnancy it is almost universally suppressed, and during the period of lactation. Occasionally, however, women of plethoric habits menstruate whilst nursing, others again are said to have

continued "regular" when pregnant. If the discharge be particularly examined in these latter cases, it will be found for the most part to consist of blood, often passing away in clots (a certain proof that it is not the menstrual secretion); the times of its appearance are irregular, and by no means correspond with the catamenial periods. We do not positively assert that no pregnant woman has ever menstruated, although, from the changes which then take place in the interior of the uterus, it is difficult to explain how it can occur. In the lectures of Dr. Blundell, published in the *Lancet*, a case of the kind is mentioned.

In the preceding pages, iron in its various forms has been recommended in cases of amenorrhœa. Whenever the preparations of this metal are prescribed, the patient ought to be apprised of their effect upon the colour of the alvine evacuations, or she would probably feel alarmed at finding them perfectly *black*, which is always sooner or later the case where the medicine is regularly taken.

MENORRHAGIA.

THE literal meaning of the word menorrhagia is, a bursting forth of the menstrual discharge, or an immoderate flow of the menses ; but in the general acceptation of the term it is used much more extensively, for it is applied to almost every coloured discharge from the womb. It is especially to be noticed, that this appellation is made use of to designate those disorders in which there is no menstrual secretion at all, but where the discharge consists of pure blood ; indeed all sanguineous effusions from the unimpregnated uterus are classed under this name. Profuse menstruation, in its strictest sense, very rarely occurs, and when present is hardly to be considered a disease, but rather the effect of repletion, and may therefore be regarded as nature's own remedy for the relief of this condition.

There are two distinct forms which this disorder assumes : first, a simply increased quantity of the secretion at its natural and stated periods ; or secondly, there may be no material alteration in the *quantity*, but the periods of recurrence more frequent, two or three weeks only intervening instead of the lunar month. This state is very inconvenient to the female, but may easily be remedied by adopt-

ing those measures which are calculated to remove the distension of the blood-vessels. Bloodletting to a moderate extent is required, and will be more beneficial if employed just prior to the expected secretion. Spare diet and the use of saline purgatives are here indicated.

The atmosphere in which the patient resides should not be over-heated, although care in avoiding exposure to cold is necessary during the flow, lest a sudden check be induced, as unpleasant symptoms would be very likely under these circumstances to be produced. It is right also to advise the patient to place herself in the recumbent position as the time is approaching, and this posture should be continued throughout the whole period. In forming a judgment in these cases, the *natural quantity* of the secretion in each individual must be ascertained, or an error will probably be committed: it has been before stated that some women menstruate much more copiously than others.

In the more common variety of what is called menorrhagia, there is not only an alteration in quantity, but in the quality also of the fluid effused, the discharge consisting of integral blood instead of the natural secretion, and hence might with great propriety be called hemorrhage from the unimpregnated womb.

These irruptions of blood take place in two opposite states of the system, namely, of plethora and inanition, from whence the division into active and passive menorrhagia : the former connected with, if not depending upon, an increase in the force as well as frequency of the arterial circulation, the latter resulting from extreme weakness of vessels, depending rather upon congestion and a retarded motion of the blood. Before entering more at large on this subject, the reader is reminded of the diagnostic mark of the catamenia as compared with blood, and this is a very simple one. If it be the latter (blood) it will coagulate, either passing away in clots, or stiffening the napkins upon which it is received ; this is not the case with the menses, which never coagulate. This circumstance renders it very easy for the practitioner to distinguish one from the other by an accurate examination.

Active Menorrhagia.

Certain symptoms are frequently met with, which characterize the approach of active hemorrhage, whether from the womb, or from any other part of the body. These are, first, a sensation of general fulness and oppression, together with increased heat ; or sometimes by an alternation of sudden

flushings with chilliness, An unusually frequent, hard, and throbbing pulse may also be observed. In addition to those general symptoms, there are also in acute "metro-hemorrhage" others of a more local character, such as pains in the back and loins, indicative of uterine irritation. In the most simple, although it must be confessed, not the most common form of the disorder, after these sensations have continued for a longer or shorter period of time, a quantity of florid red blood, apparently arterial, escapes from the uterus, the pains are relieved, the constitutional symptoms subside, and the hemorrhage ceases.

In general, however, such a sudden termination of this affection cannot, with any degree of certainty, be calculated upon; the patient will be found still labouring under febrile excitement notwithstanding the discharge of blood; the pulse is hard and perhaps frequent; there is pain and weight in the head, the skin hot and dry, the tongue furred, the lips parched, and the countenance flushed; the flow, also, may have produced no alleviation of uterine uneasiness, the patient still complaining of pain in the loins; there is great thirst with diminution of the secretions.

Treatment of Active Menorrhagia.

The cause of this affection may be referred to an increased excitement of the organs of circulation, consequently the first indication to be fulfilled is to diminish vascular action generally. This may be effected in the first instance (provided the medical man is consulted sufficiently early) by the abstraction of blood from the arm, the quantity of course being proportioned to the necessity of each individual case. No little caution is requisite in determining the extent to which this remedy should be carried; we ought not to forget that there is hemorrhage already going on, which it may be difficult to arrest, and therefore the good effects of blood-letting will be experienced from the continuance of the actual disorder; for this reason the author scarcely ever recommends in his own practice a second venesection.

One of the most important points in the management of the complaint, consists in regulating the position of the body; unless the recumbent posture be strictly enjoined, and as strictly maintained, it will be vain to expect benefit from any plan of treatment; this, therefore, should be the first direction given by the attendant on entering the patient's room; not that it is proper to confine her to a

warm bed, lest the action of the heart be increasingly excited; either a couch or hard mattress will be preferable. It is necessary for some females to be undressed and regularly placed in their beds, for this simple reason, that it would be otherwise impossible to keep them sufficiently quiet. All stimulation, whether of a local or general kind, is most scrupulously to be avoided. A free state of the bowels should also be preserved; there is nothing which has a greater tendency to keep up the hemorrhage, whether it be active or passive, than to suffer the rectum to become distended, from fecal accumulation; for this purpose, the mildest laxatives should be administered; nothing answers the purpose better than half an ounce of castor oil: the best mode of exhibiting oil is to shake it rather violently in a large phial which contains about an ounce of milk; by this agitation it is diffused through the fluid, and if taken immediately, glides over the tongue and fauces without adhering to them. We have known many delicate ladies retain the medicine on their stomachs when given in this form, although it had previously been rejected by vomiting when taken in the ordinary manner; or the following draught may be ordered:

R. Pulv. rhei, gr. xv.
Potas. sulphat., ʒij.
Aq. menthæ piper, ʒjss.
F. haust. aper. pro re nata sumend.

In some cases an enema of salt and water may be advantageously substituted for the aperient medicine, taking care that it be not applied too warm. It need scarcely be stated that irritating purgatives are improper, as they have a direct tendency to increase the flow of blood.

After the use of bloodletting and laxatives, depressing medicines are proper; and we can recommend none more likely to be attended with benefit than the nitrate of potash, given in large doses (from gr. xv. to gr. xxv.) every few hours. The stomach will retain the larger quantities if considerably diluted; it is well, therefore to dissolve it in a tea-cupful of gruel or barley-water; some prefer digitalis, or emetic tartar, but these are not such manageable remedies as potassæ nitras, and when we can secure the same good result by the milder medicines, it requires no argument to prove we are justified in making use of them. The effect of nitre is sensibly to diminish the frequency and force of the pulse, and this is often attended with feeling of nausea.

By this plan the activity of the constitutional symptoms will be soon subdued; should the hemorrhage continue, topical remedies, directed to the uterus itself, are required: the most common and effective of which is, the application of cloths,

wetted with the coldest water, to the vulva, perineum, and pubic region. We have seen great benefit derived from the application of a bladder containing pounded ice to the latter situation. Not only does this plan possess all the advantages of cold, but it conduces greatly to the comfort of the patient, as the bed-clothes are preserved free from moisture. There is no part of the treatment, however, which requires a greater degree of circumspection; its thoughtless and indiscriminate use would be productive of serious mischief; if cold be employed before the febrile and inflammatory symptoms have been subdued, no good, but positive harm would be the result. The first indication, let it be remembered, in the treatment of this disorder, is not so much to stop the flow of blood by any direct means, as to lower the action of the heart and arteries; the object, in fact, being the removal of the *cause*, and not the mere relief of *symptoms*.

The diet must be necessarily spare, and as common beverage, iced lemonade, barley-water with acid, or toast-water, are the most proper articles. Fermented or spirituous drinks must not be allowed. Diaphoretics have been recommended by some, with a view of keeping up the action of the cutaneous vessels; no reliance can be placed on this class of remedies. Mercury has had its advocates also, but its utility may be fairly questioned, especially

during the continuance of the active symptoms. Menorrhagia cannot long continue in its active form, symptoms presently make their appearance, which characterize

Passive Menorrhagia.

This is not always preceded by active hemorrhage. In weakly, irritable, and delicate habits, it may be passive from the commencement. The patient's situation is here much more alarming, and the case assumes a very formidable character if the bleeding be not speedily arrested. The symptoms, as might be expected, are totally different, and the plan of treatment quite the opposite to what has been recommended in the active form of the complaint.

With this hemorrhage there is a rapid reduction of the little strength previously existing ; the countenance is pallid, in some cases assuming an almost bloodless appearance ; the pulse hurried and feeble ; the extremities, and sometimes the whole surface of the body, cold ; there is weight and pain in the head, particularly over the eyebrows and forehead ; a distressing sensation of faintness and giddiness, and occasionally nausea and vomiting ; laborious respiration is also a frequent attendant

on the more severe and dangerous forms of passive menorrhagia.

We have already stated that in active menorrhagia, the blood which passes away is of a bright, florid, arterial tint; here, on the contrary, it is dark coloured, and approaches more to the character of venous. The symptoms enumerated above occur in a more slight, or a more aggravated form, and hence the disease will require a more or less energetic method of treatment for its relief. In the mildest variety, however, the recumbent position must be submitted to at once, for every remedy will fail unless the patient keep herself perfectly quiet. Where the bowels are constipated, a common enema should be prescribed, to be used nearly cold. Great benefit will be experienced from the exhibition of astringent tonics; the mineral acids, for example, combined with vegetable bitters, *calumba*, *gentian*, *quina*. If the patient's taste be somewhat fastidious, or should there be a tendency to nausea, the following draught will be found both agreeable and useful.

R. Tinct. Kino.

Syr. Rheados. āā, 3 j.

Acid. sulph. dilut., ʒ xx.

Aq. distillat., 3 x. f. haust. 4tâ quâque horâ sumend.

In the author's own practice, the tinctura ferri

muriat. has been found more serviceable than any other single remedy ; he has been in the habit of prescribing from fifteen to twenty minims, thrice in the day, with an equal quantity of tinctura hyoscyami, where there was much pain or restlessness. It will be necessary to try various remedies, however, as the same does not agree equally well with every patient.

The milder cases of passive hemorrhagia are those in which the application of cold is particularly useful, provided it be assiduously employed. An ordinary nurse is not to be trusted with the management of this remedy ; it ought to be superintended by the practitioner himself ; if he leaves the room, simply *directing* cold to be applied, it is probable he will find on his next visit, not a cold napkin but a warm fomentation at the vulva, in consequence of the nurse having neglected to renew it frequently. It is, perhaps, unnecessary to state, that in the more severe degrees of this affection, where there is a general coldness of the body, these applications must not be had recourse to, as the powers of the system, already greatly reduced, would certainly sink still lower under their use ; on the contrary, it is often necessary to apply bottles of hot water to the feet, axillæ, &c., and in some cases, to envelope the whole body in warm flannel. More powerful internal remedies are also needed ;

and of these, the superacetate of lead occupies the first place; its power as a styptic has been long known, from whatever part the blood may be flowing; but as griping and colicky pains are frequently caused by its use, opium should be given at the same time; from one to two grains of the superacetate with a quarter or half a grain of opium may be safely administered every two hours, until four doses have been taken. It is better then to wait a while, and should abdominal pains be complained of, the remedy must be laid aside; if there should be no such unpleasant symptoms, after the lapse of three or four hours, the same number of pills may be again prescribed, the patient being at the same time closely watched, lest circumstances should occur requiring an immediate discontinuance of the lead. Under these restrictions, and with the exercise of proper care, the superacetate is an invaluable medicine, but it must be acknowledged to be a dangerous remedy if used without sufficient care.

Whether vegetable acids would be productive of more advantage than the mineral in these cases, the author is not prepared to say, not having given them a comparative trial; his thoughts have been directed to this subject by a fact related by a patient, who stated that she was always able to produce a temporary suspension of the menstrual

discharge by taking "a gill of common vinegar," so that if she wished to spend an evening from home during the catamenial period, she was in the habit of drinking this quantity of vinegar, which, according to her own statement, had the invariable effect of stopping the discharge until the following morning, when it regularly and constantly returned.

The *secale cornutum* is supposed by many to operate beneficially in restraining the hemorrhage; and although it be unwise to place much reliance upon it, yet it deserves a trial: half a drachm of the essence, as prepared by Battley of Red Cross Street, is a fair average dose, mixed with a cup of gruel, to which a small quantity of ardent spirit may be added; this potion to be repeated every six or eight hours. The *secale* should not be trusted to except as an adjuvant, and ought not to supersede other remedies whose effects are more certain.

Should the hemorrhage continue, something further must be attempted: a well-introduced plug is the most likely to succeed in these cases. Strips of old linen, about three inches in breadth and of convenient length, should be smeared over with oil and gradually and gently insinuated into the vagina until its cavity is completely filled: sometimes these strips are wetted with an astringent solution, but

no advantage is derived from such applications. The obvious effect of this is to detain the blood within the uterus, where it coagulates; and by thus forming a clot around the orifices of the bleeding vessels must, at least for a time, prevent any further effusion. If the plug be too soon removed, or the woman suffered to move about, the little temporary barrier which has been formed will be dislodged and the hemorrhage will recur.

There are sometimes so much tenderness and irritability of the genitals and neighbouring parts, that the application cannot be borne for a sufficient length of time; the female complains of pain, with a bearing-down sensation, with frequent desire to pass urine and to empty the bowels: here the mode of proceeding is evidently the removal of the plug; where no such inconvenience is experienced, it should be allowed to remain for at least three or four days, and if on its withdrawal there should be any indications of returning hemorrhage, a fresh one must be immediately introduced.

In two of the most severe cases which the author has attended, the plug proved of permanent benefit after other means had failed. One lady (the patient of Mr. Ponten of Ludgate Hill) lost an enormous quantity of blood, very nearly if not quite equal in amount to that which now and then bursts forth

from the puerperal womb: on one occasion the bed was literally soaked with blood. The common styptic medicines here proved utterly unavailing; the hemorrhage was, however, arrested by the first plug; when this was removed, an astringent injection was employed, and there was no renewal of the bleeding.

Another plan was strongly recommended by the late Dr. Haighton in his invaluable lectures on midwifery, namely, the injection of a styptic solution, not into the vagina merely, but into the cavity of the womb itself. For this purpose an elastic gum bottle is required, having a curved pipe attached to it; the patient is to be placed on her left side, in the usual obstetric position, and the bottle having been previously filled, the extremity of the tube should be introduced about half or three quarters of an inch within the os uteri: when pressure is made upon the elastic bottle, the fluid will necessarily be diffused over the whole internal surface of the uterus, and by coming in contact with the orifices of the bleeding vessels, will produce coagulation of the blood around, and probably to a certain extent *within* them, and thus prevent for the time any further hemorrhage. The liquid recommended by Dr. Haighton was a solution of sulphate of iron in strong green tea. Other substances will succeed equally well, e. g. common alum, sulphate of zinc,

or sulphate of copper, dissolved in strong decoction of oak-bark: the choice of the styptic may be left to the judgment of the practitioner. About half an ounce of such liquid should be injected twice or thrice every twenty-four hours. If this plan be decided upon, the medical man should superintend it himself, as some little anatomical knowledge is required in introducing the pipe through the os uteri. Dr. Haighton used to say, he believed he had saved several lives by his injections.

A very nourishing diet is requisite in these cases, or the patient would sink below the possibility of recovery. Those articles are the most proper which contain the largest proportion of nutriment in the smallest bulk, as the stomach will not retain much at a time. This organ, in common with others, suffers from the debilitating effects of the hemorrhage; and as the quantity of blood necessary for the secretion of the gastric juice is greatly lessened, so the digestive powers must be proportionally diminished.

The best form in which nourishment can be administered is the yolk of a new-laid egg, well beaten up with a small quantity of warm water, a tablespoonful of brandy, with sugar and nutmeg *ad libitum*: this is a most nutritious as well as an agreeable compound, and will often be retained on the

stomach when everything else has been rejected ; about half an ounce may be given at occasional intervals, until two or three eggs have been taken ; some patients prefer beef-tea, broths, or the animal jellies, all of which are beneficial : as soon as the stomach is somewhat roused from its state of torpor, solid food will be admissible. Stimulating drinks are often required at the same time, wine, ale, or beer being allowed, as may best suit the inclination of the female.

Change of air will contribute greatly to the restoration of health when convalescence has commenced ; those localities which are the most free from moisture, and where the air is cold and bracing, are to be preferred. Then also the daily use of the bidet is particularly useful. Notwithstanding the use of all the means which have been recommended, a long period of time often elapses before the health and strength are completely recruited : it is frequently necessary to continue the tonic plan for several months, although in some cases the system recovers its usual tone with great rapidity after the hemorrhage has been arrested.

Would the transfusion of pure, healthy, living blood into the veins be of service in the most extreme variety of passive menorrhagia ? The affirmative seems highly probable, for in the dissection of

some who have died in consequence of this disorder, no organic change has been discovered in the womb. The organ has been seen to be enlarged, and the orifices of the small vessels ramifying in its lining membrane more patulous than in their natural and healthy condition. The author is perfectly aware of the objection raised against this operation, which has been so often reiterated in the following words, or at any rate to this effect: "What is the use of transfusion whilst the drain is still going on? As fast as you put blood into the arm it will escape from the orifices of the uterine vessels." Let this objection be examined into, that it may be seen whether there be so much force in it as some persons imagine. We readily allow that the extremities of these vessels are sufficiently open to admit the passage of integral blood through them, yet this state is the result of debility, and this debility induced by the profuseness of the hemorrhage. Now, under these circumstances, is it inconsistent with sound principle to expect that with increase of blood this condition of general exhaustion will be relieved, and such a degree of tonicity thereby given to the muscular fibres of the uterus as well as to its capillary vessels, as would produce a certain amount of contraction, sufficient to avert the impending danger?

The author cannot discover any reason why the

operation should not be performed, if the common remedial measures are found to be failing, and the exhaustion hourly increasing. Let it not be for one moment supposed he is advocating transfusion as the ordinary and *common* method of treating the complaint now under consideration ; he is quite sure where due attention has been paid, it will *very rarely indeed* be either necessary or proper ; but the extreme case may occur, and our art is confessedly imperfect if we are not prepared with a remedy for *this* as well as those cases attended with less danger. As regards himself, with the experience he has had of the safety and efficacy of transfusion when employed in puerperal hemorrhage, he would feel that he had not performed his duty were he to allow a patient to die from menorrhagia without the operation having been proposed to be performed ; and this impression would be deepened by the consideration, that no harm could have resulted from the trial, even although benefit had not been derived, no doubt existing in his mind of its perfect freedom from danger in the hands of a careful practitioner. Having, however, in a former publication, promulgated his views on this important point, (see *Denman's Introduction to Midwifery*, 7th edition, p. 409,) the reader is referred to that volume for a more detailed examination of the subject.

Some women are the subjects of menorrhagia

every month, so that as soon as and in many cases before they have recovered from one attack another supervenes. It is here very desirable to employ those remedies in the interval which are likely to prevent a recurrence: the circumstances necessary to be attended to are, first, the state of the constitution; secondly, the nature of the affection, whether active or passive; and thirdly, the exciting cause. These preliminaries having been clearly ascertained, the appropriate treatment will be suggested to the mind of the practitioner. The principal indications are, to build up the constitution where it is weakly, and to depress, if there be too much activity and power in the circulatory system.

In long-continued passive hemorrhages, the liver is a viscus whose condition should be minutely enquired into, as next to the heart itself, there is scarcely an organ in the body, the healthy state of which is so necessary to maintain the balance of the circulation; if there be hepatic derangement, the smaller doses of mercury should be administered, and when free circulation in the portal system has been procured, the uterine discharge will in all probability cease.

Lastly, it should never be forgotten, that effusions of blood from the womb are not always the result of simple functional disorder; they are the never-fail-

ing attendants of many organic diseases. Hemorrhage occurs in polypus, hydatids, cauliflower excrescence, carcinoma, malignant ulcer, fungus hæmatodes, &c. Some females, again, lose considerable quantities of blood during pregnancy. The author attends a lady who for the first four months suffers greatly from repeated floodings. It will be apparent, therefore, that in all cases of protracted bleedings from the womb, an examination per vaginam must be made, that their nature and cause may be satisfactorily ascertained, as incalculable mischief might be the result of an erroneous opinion in this respect.

DYSMENORRHŒA.

THE last variety of disordered mēnstruation to be noticed is one which is very common, and also very harassing to the patient : it is called dysmenorrhœa (*difficult or painful menstruation*). Of this malady there are two species,

1st, *Dysmenorrhœa with membranous formation.*

2d, *Dysmenorrhœa without membrane.*

The subject of the first variety menstruates at the regular and proper periods, but at the same time experiences an intensity of pain scarcely exceeded in amount by the parturient efforts of the womb at the time of labour. Dr. Denman says, and says truly, "The pain with which some women menstruate at each period is sufficient to render a great part of their lives miserable." The excitement attendant upon this state of suffering has in some women produced actual delirium. The evacuation, although regular in its recurrence, is very deficient in quantity ; and indeed there is often no menstrual secretion, but in its stead, a tough thick membrane, resembling the tunica decidua of pregnancy, is discharged, the uterus acting forcibly as

in labour: a small quantity of blood generally attends its expulsion. These membranous portions vary greatly in size; they are sometimes large, and at others mere shreds, but will be found to present the same general appearances, one surface being soft and smooth, whilst the other is rough and shaggy.

Dr. Denman, who paid great attention to this variety of dysmenorrhœa, asserts, that “no woman in the habit of forming this membrane, has been known to conceive whilst such habit exists.” This opinion, however, is not altogether correct: many well-authenticated cases proving the contrary have occurred; two or three under the immediate observation of the author, where membranous menstruation had existed for some time, and yet impregnation followed immediately after marriage. When conception takes place, and especially if the female proceed to the full period of utero-gestation, a radical cure may with some degree of confidence be anticipated; the process of child-bearing effecting so complete a change of action in the vessels of the menstruating membrane, that they afterwards perform their office with regularity and without pain. If therefore impregnation could with any degree of certainty be calculated upon, there would be no objection, but on the contrary everything to encourage a recommendation which has been considered

by many as a likely method to effect a cure, namely, an alteration in the sexual condition of the patient. General experience, however, favours the opinion, that women suffering under dysmenorrhœa attended with membranous formation do not so readily conceive as those whose monthly secretion is regularly and properly performed : the exceptions, nevertheless, to this general rule are sufficiently numerous to induce hesitation in pronouncing irregular menstruation an actual obstacle to marriage.

From the peculiar symptoms attending this form of the disorder, namely, the expulsion of membrane resembling the decidua, bearing-down pains, discharge of blood, &c., it is possible for the case to be mistaken for a miscarriage. If the subject be a married lady, the error will be of no consequence; but should she be unmarried, suspicions the most unfounded, unjust, and fatally injurious to her reputation, will be excited, if not set at rest by the deliberate and firm opinion of the attendant practitioner.

It is very difficult, if not impossible, in every case to distinguish the one membrane from the other: the general character of the female must be taken into account, with various other circumstances which cannot well be described in writing, but will readily suggest themselves to the mind of the medical man.

The author is persuaded that, in the majority of instances, even where there may be some doubt, it is safer to treat the case as dysmenorrhœa where no trace of a foetus is discernible.

Treatment of Dysmenorrhœa with Membranous Formation.

So far as regards the *cure* of this affection, the treatment is most unsatisfactory, but relief may generally be obtained *at the time*; and by a repetition of the same palliative means at each successive monthly period, the intense pain will be prevented, and the female rendered much more comfortable than she would otherwise have been. Anodynes are the only class of medicines upon which much reliance can be placed, and of these opium is the most certain, and should always be selected unless contra-indicated by some peculiar idiosyncrasy of constitution; if combined with a diaphoretic, the effect is more decided.

R. Liq. ammon. acet., ʒ iij.
Syr. papaveris, ʒ j.
Tinct. opii, ℥ x. ad ℥ xv.
Mist. camphoræ, ʒ j.
F. haustus quartis horis sumend.

R. Pulv. ipecac. co., gr. v. ad gr. x.
Hydr. c. cretâ., gr. v.
Sit pulvis horâ somni sumend.

The state of the alimentary canal must not be lost sight of, as an accumulation of feculent matter in the rectum materially aggravates every form of uterine disorder. Should opium disagree, hyoscyamus or poppy should be had recourse to.

R. Tinct. hyoscy.
Syr. papav. āā 3 ss.
Sp. ether. co., ℥ xx.
Mist. camphor., ℥ i. Sit haustus.

The hip-bath should be used, followed by frictions with anodyne embrocations over the lumbar and uterine regions: much reliance cannot however be placed upon these applications.

In some cases the formation of this membrane may be attributed to an action of the vessels fairly amounting to inflammation, and here the antiphlogistic treatment to a certain extent will be necessary. Cupping from the loins, followed by the application of ten or twelve leeches to the vulva, should be immediately had recourse to: pain may afterwards be relieved by the use of anodynes as before recommended. After the menstrual period has passed over, a mild mercurial course is useful, as tending to alter the action of the discerning vessels.

Again, dysmenorrhœa may be the result of a rheumatic affection of the womb: this is usually

accompanied with signs of rheumatism in other parts of the body, the uterus not being the only part affected. The remedies are in this case to be directed to the general disorder, and those medicines exhibited as are known to relieve rheumatic disorders: the colchicum, either in wine (vinum colchici) or powder, may be given; tinct. guaiaci ammoniata has also had its advocates, and in chronic cases sometimes affords relief. The pain seems now and then to proceed from spasmodic affection of the organ: opium and the warm bath seldom fail to relieve under such circumstances.

Dr. M'Intosh supposes this painful affection to be referrible to a thickened state of the os and cervix uteri, by means of which the orifice becomes narrowed, and in some cases nearly closed; he consequently recommends the use of bougies, for the purpose of dilating the part: we cannot speak of this plan from personal experience, never having given it a fair trial, but it seems very difficult to explain the effect by the cause supposed by Dr. M'Intosh.

Dysmenorrhœa without Membrane.

Women sometimes experience great pain (quite equal to that already described) during the catamenial period, but the circumstances attending the

discharge vary. There is no deficiency, but, on the contrary, rather an augmentation of the flow, and if this be examined clots of considerable size will be noticed, showing that the effusion is in part sanguineous. The subjects of this form of dysmenorrhœa are weakly and delicate, of an easily excitable, nervous, or hysterical temperament; great prostration of strength is experienced at the time; the extremities are cold, and sometimes the body generally; the pulse feeble and quick; the countenance sallow, and its expression anxious.

The treatment of dysmenorrhœa without membranous formation is much more satisfactory than in the previously described variety; complete relief being generally afforded provided the patient adheres strictly to the directions given her. In the first place, she must be confined to her bed, as nothing tends so much to relieve pain as external warmth: should coldness still be complained of, a small quantity of weak but hot gin and water should be given, and after reaction has taken place a soothing draught of hyoscyamus, ether, &c. (vide p. 67,) every four or five hours, with or without opium as the case may require.

Dysmenorrhœa without membrane does not appear to interfere in any way with conception; it often happens that pregnancy cures the disorder, so that

after marriage the complaint disappears, the action of the uterine vessels, as has been before noticed, being so completely altered by the process of gestation.

Whilst attention is paid to the uterus during the period of menstruation, it is most important that the general constitution should not be neglected during the intervals. Its condition should be examined into, whether plethoric or debilitated: if the former, depressing medicines with low diet will be required; if the latter, tonics and a generous diet are the most appropriate means of relief. In all cases the bowels should be kept in a regular state, and all sources of irritation avoided as the period is approaching, the recumbent position for the most part enjoined, and all active exertion prohibited. The young practitioner is advised to be very careful in his prognosis so far as regards a cure; in many instances relief only can be obtained; the disorder in more obstinate cases sometimes will at length wear itself out.

CESSATION OF MENSTRUATION.

“Critical period,” “Turn of life,” “The change.”

It has been observed previously, that the time when the menstrual discharge ceases is regulated by its first appearance, commonly continuing for about the space of thirty years. Numerous examples might be adduced as exceptions to this general rule. Generally however in this country when a female has arrived at the age of forty-five years, certain indications of the coming event are experienced. In some cases the discharge gradually diminishes, and at length totally disappears, without producing any feelings of inconvenience, but this is not common: there are generally great irregularities; the flow may be entirely absent for six, eight, or ten weeks, and then reappears, sometimes in larger, sometimes in smaller quantities than usual. On the other hand the discharge may be profuse, frequently repeated, and where this is the case it is almost always sanguineous in its character.

This period is usually designated by women “the

dodging time," an epithet which describes their condition with a tolerable degree of exactness. There is often great constitutional irritation, with determination of blood to the head, or some other organ of the body; it becomes then of great consequence for the medical attendant not to content himself with directing his attention solely to the uterus, but to take a comprehensive view of the state of the system generally.

Most females look upon the cessation of menstruation as a critical time, which they call "the turn of life;" and although their fears are often groundless, for it is not reasonable to suppose that the cessation of this function (which is as natural as its commencement) should invariably and of necessity give rise to disease, yet it is an unquestionable fact, that if there be a morbid disposition in any part of the body, more especially should it exist in the womb or breast, there will be a more rapid progress at *this* than at any other previous period. The older authors attempted to explain this circumstance by the supposition that "menstruous blood" possessed properties of a peculiarly noxious quality, that menstruation was the appointed means of ridding the system of something which was highly deleterious; they very naturally, therefore, considered the stoppage of this evacuation to be the cause of disorder, although it might develop itself in some

distant part of the body. This opinion is decidedly erroneous : the true explanation of the reason why an advance of disease is so frequently noticed at the "turn of life" is simply this, that the constitution, or the parts disposed to morbid action, are not now, as heretofore, relieved by the local determination and secretion. If, then, there be symptoms of uterine or any other disease, unless they be promptly attended to, the consequences may be most serious. Are there not many cases of cancer uteri, whose progress, if not origin, may be traced to neglect at this most important period of female existence ?

Females at this time very frequently are subject to great irritation in the pelvis generally, the uterus, bladder, and rectum appearing to be equally involved : the symptoms complained of are, a bearing-down sensation, accompanied in many instances with decided uterine pain, tenesmus, often described as "a forcing backwards," frequent inclination to void urine, together with heat and smarting at the orifice of the urethra ; the vagina is also in a tender state, great pain being experienced if an examination be instituted. The uterus is tender to the touch, and its lips in some cases slightly tumid.

This state of parts is speedily and effectually relieved by the application of leeches to the vulva. The frequent use of warm fomentations and in-

jections, with the internal exhibition of an alkaline laxative. The following is the author's favorite combination, which seldom fails to produce a good effect in these cases :

R. Potassæ sulphat., ʒ j. ad ʒ ss.
—— liquoris, ℥ xv. ad ℥ xx.
Tinct. hyoseyami, ʒ ss.
Aq. menthæ piper., ʒ xi.
Sit haustus ter die sumend.

Should there be great irritability of the general system, sleep may be procured by the use of a full opiate at bed-time. In females of strong and plethoric habits, especially where there are signs of cerebral congestion, such as pain and weight in the head, giddiness, dimness of sight, &c. &c., blood must be taken away in larger quantities, either from the nape of the neck by means of cupping-glasses, or by the ordinary mode of venesection from the arm ; and it may be necessary to repeat these means of reducing the circulation periodically for a few months, allowing a four weeks' interval to elapse between each. Free purging is also required, and a very spare diet ; indeed, the antiphlogistic plan to its fullest extent must be had recourse to. Hepatic derangement and dyspeptic affections are very common at this time ; they partake of the same character and demand the same treatment as at other times.

From the notion already referred to, namely, that the cessation of menstruation unavoidably and of necessity gave rise to disease, some have most injudiciously recommended the use of stimulating emmenagogues. The author will not insult the understanding of the reader by using any argument in order to prove the absurdity of endeavouring to keep up a discharge which nature intends should altogether cease, considering it too obvious to require more than a passing notice: no man possessed of the common powers of reason and reflection would, he thinks, ever have recourse to this class of medicines under such circumstances.

Should the individual be in perfect health, and have no tendency to disease, she will suffer no particular inconvenience, unless the increase in size which sometimes occurs be considered as such; and really, in some persons, an augmentation in the adipose deposit takes place in a most remarkable, and to a most uncomfortable degree. A tympanitic distension of the abdomen is not uncommon at the termination of the menstrual function, and this circumstance has in some instances deceived the female, she herself believing that she was pregnant; an error, the rectification of which will not be difficult. It is not likely for the medical man to be long deceived: the usual signs which characterize pregnancy are absent—the abdomen enlarges *generally*,

and feels soft and flabby ; in pregnancy the enlargement is gradual, beginning at the lower part and extending upwards : the uterus may be felt through the parietes, like a firm unyielding tumour. In tympanites again, there is no protrusion of the umbilicus ; if there be motion, and this is often the result of flatulence, it will not be felt in the region of the womb alone, but sometimes in one position, sometimes in another ; there is also a variation in size, the patient being large at one time, smaller at another. Careful observation of these particulars will prevent the occurrence of mistakes.

STERILITY OR BARRENNESS.

DIFFERENT opinions have been entertained respecting the causes of sterility. They may, however, be divided into two sets, the organic and the functional. Under the former head (organic causes) we may notice, imperfect development of the uterus or ovaries, and in some cases their entire absence; where these deficiencies exist, the changes already described as characterizing the age of puberty do not occur, and there is no menstrual flow. Obliteration of the fallopian tubes is sometimes met with, either as an original malformation, or as the result of inflammatory action; and where this happens, the access of the male semen to the ovarian vesicle, which is requisite for the purposes of conception, is unavoidably prevented, and barrenness is the necessary result. It is believed by some, that too frequent sexual intercourse, by inducing inflammation, may produce this closure of the tube, and they state this as the reason why comparatively few prostitutes conceive; but it should not be hastily inferred that these unfortunate creatures rarely become pregnant, because they so seldom proceed to

the full period of gestation. I think it highly probable, if we were fully acquainted with their habits, we should find that a great number of miscarriages took place amongst them; their dissolute and unhappy mode of living greatly conducing to this event. The same circumstances will, undoubtedly, in many instances prevent conception.

In general, however, the cause of sterility is not attributable to organic defect, as the generative organs are usually well formed, but to derangement of their function, and this derangement not unfrequently depending upon constitutional causes: the state of the catamenial secretion should be carefully investigated, as this is the index which points out the healthy or unhealthy condition of the uterus. Should this function be deranged, the next enquiry is, whether the womb itself is at fault, or whether there is a generally-disturbed state of action in other organs of the body. Where the womb appears to be the principal seat of this disorder, a very mild course of mercury exhibited with caution is well calculated to alter the action of the vessels of the menstruating membrane: the tepid salt-water bath should be used at the same time. As there is in most cases debility of system conjoined with, if not producing, faulty uterine action, the most powerful tonics are required; and indeed, in a large majority of cases (the organs being perfect), attention to the general

health is the only probable method of relieving this condition. It may be observed, lastly, that the uterine system may be acted upon by the semen of one person and not of another. A case illustrative of this fact occurred some years since in the author's experience: a female was married at the age of twenty-one, lived with her husband for twenty years, but had no child; at the age of forty-one she was left a widow; she soon afterwards married again, and was delivered within the year of a healthy full-sized infant. It has been commonly noticed that very fat women do not conceive so readily as those of spare make: we do not mean to assert that obesity in itself produces barrenness; still it should be remembered, that a defective condition, or entire absence of the ovary, is always accompanied with large deposits of adipose substance.

DISEASES OF THE UNIMPREGNATED WOMB.

ALTHOUGH of late years a greater degree of attention has been paid to diseases of the uterus, yet that attention has not been commensurate with their importance, for we find even now, in many cases referred to us, that the treatment has not been based upon sound practical knowledge: the practitioner has been too often content with observing symptoms, without tracing them to their original cause. This mode of proceeding with regard to uterine diseases must be attended with great disadvantage, since the various affections of this organ are so often characterized by the same external symptoms: we need only refer to mucous and sanguineous discharges as proofs of the truth of this assertion. Again, it will be found that uterine pains, from whatever cause they originate, present the same general character, commencing at the back, extending forwards through the pelvis, and descending to the upper and inner part of the thigh. All the above signs may exist where the complaint is curable, or they may indicate those most severe

and deadly diseases which bid defiance to our art; in giving a prognosis, it is indispensably necessary to discriminate between these different forms of disease: this knowledge is of equal importance, also, in the practical application of the remedies required. The uterus is liable to many disorders, varying in kind and differing in character; the more simple will be first described.

INFLAMMATION OF THE WOMB.

Hysteritis, Metritis.

The substance of the unimpregnated womb is now and then the seat of inflammatory action; the early symptoms of the disorder are somewhat obscure, inasmuch as they are present in many other uterine affections. Uneasiness rather than acute pain is at first experienced in the region of the womb, never wholly remitting, but subject to occasional violent exacerbations; these soon subside, and are not unlike the first pains of labour. Very little constitutional disturbance is manifested; the surface of the body remains cool, the tongue scarcely altered from its natural condition, and the pulsations of the artery at the wrist neither increased in frequency or force. From the intimate consent which exists be-

tween the uterus and the stomach, derangement of the functions of the latter organ invariably takes place; nausea, with or without vomiting, is always present. This symptom is much more distressing in some patients than in others, as it depends upon peculiarity of constitution on the one hand, and the degree of irritability of the stomach on the other. The well-known sympathy between the uterus and bladder is here manifested, producing an almost constant inclination to void urine; if the water be suffered to accumulate, there will be a great aggravation of the patient's suffering. Just before the period of menstruation the pain increases; this effect doubtless is produced by the increased quantity of blood determined to the uterus for the purpose of its secretion.

When the inflammation continues for any considerable length of time, the function of the uterus is altogether suspended, when a material increase of uneasiness *generally* as well as *locally* is experienced. *Firm* pressure above the symphysis pubis gives pain; from the situation of the womb, (low in the pelvis, and defended by bone,) a certain degree can be borne by the female without flinching. A leucorrhœal discharge in greater or less quantity is one of the early symptoms of hysteritis; where this is profuse it is useful, as tending to lessen inflammatory action. Advice is not often sought in the

early stages of the disease, the pain and inconvenience is scarcely sufficient to attract notice until a considerable time has elapsed ; or if these symptoms be noticed, they are seldom thought serious enough to render medical relief necessary ; application therefore is not made until the disorder is completely established, and the time passed by when it might have been cured without difficulty. The most common cause of the disease is too frequent sexual intercourse: newly-married females are often the subjects of hysteritis, and in these cases the vagina is also involved to a greater or less extent. It has been before stated, that sudden suppression of the menses in a plethoric habit is sometimes followed by inflammation, particularly if the individual has been exposed to the action of cold and moisture.

Hysteritis is of two kinds, active or passive ; and according to the presence of either of these forms, so will the symptoms be modified, and a corresponding adaptation of the treatment be required, although the general plan remains the same. Is inflammation of the womb when it occurs in the pregnant condition the cause of morbid adhesion of the placenta ? It seems probable that such is the case, that adhesive matter has been effused as a consequence of inflammatory action, for in these cases an extraordinary degree of pain is often felt in some part of the uterus during the pregnant period.

Treatment of Hysteritis.

The treatment of inflammation of the unimpregnated womb must be regulated by its form, whether active or passive, and by the general constitution of the patient, whether strong and healthy with a vigorous circulation, or weakly and debilitated with a feeble and rapid pulse. The uterus is an organ small in size, and not actually essential to life, neither is it a very sensitive part, so that should the disease take on the active form, no very serious constitutional disturbance will be excited at the commencement. In but few instances is general blood-letting required, but in all local abstraction of blood is necessary. This may be effected in two ways, either by the application of cupping-glasses to the loins, or of leeches on the more immediate neighbourhood of the seat of disease. The greater amount of good is obtained from applying ten or twelve leeches just within the os externum, and encouraging the oozing of blood from the parts by placing the patient in a warm bath; this will also be serviceable as a local fomentation: it should be used for at least half an hour unless faintness occurs. In prescribing a repetition of the bleeding, we should be guided partly by its effect on the disease, and partly by the influence it has had upon the constitution.

Purging must be employed with great caution; two or three evacuations may be procured daily by the use of any common aperient, but neither this remedy nor bleeding should be carried too far, more especially if the complaint arise in a female of delicate constitution, which it most frequently does, where much depressing medicine cannot be borne with impunity. A small quantity of any neutral salt, given every morning fasting, will answer the purpose exceedingly well.

Determination to the skin is very useful, as assisting the equalization of the balance of the circulation and acting upon the old principle of revulsion. For this purpose liq. ammon. acetat., with minute portions of antim. tart. may be prescribed; and should there be great irritability, with feeble vascular action, full doses of hyoscyamus or opium should be added to the diaphoretic medicine. Attention to diet constitutes a very essential part of the treatment, for while the use of rich and stimulating food is to be deprecated, it is equally necessary to avoid the opposite extreme: inflammation of the unimpregnated womb even in its more active form, does not require starvation for its cure; a bland, and at the same time a moderately nourishing diet should be allowed.

In this disorder, and indeed in all others to which

the human frame is obnoxious—for the observation will apply generally as well as particularly—the degree to which the antiphlogistic plan is to be carried can alone be judiciously determined by observing the peculiarity of the individual's constitution, whether she be robust and the circulation powerful, or otherwise. And here it may be remarked, that mere frequency of pulse does not indicate the propriety of active depletion, but rather the reverse; for the circulation is usually rapid in proportion to the degree of debility present in the general system: if antiphlogistic means were employed in these cases, it is quite evident that the symptoms would be increased instead of diminished. An unwise attempt to force the menstrual evacuation by the use of emmenagogues would obviously be the means of increasing inflammation if already present.

If the malady continue, and appear to be taking on the chronic form, mercury should be had recourse to, a watchful care being exercised over its effect on the constitution at large, lest weakness and irritability be increased by its use.

R. Pilul. hydrarg., gr. j

Ext. conii, gr. iij.

Sit pilula ter die sumend. cum decoct. sarsaparillæ co. cyatho.

Sarsaparilla often allays the excitement produced by mercury, enabling the patient to undergo the

necessary course required for her cure. The bitter infusions may in some cases be advantageously substituted for sarsaparilla; and where the system is very much enfeebled, still more powerful tonics will be necessary. The diet must correspond with the general plan of treatment, being more or less generous according to the particular circumstances of the case. The recumbent position is necessary throughout the whole period of the disease.

Perfect restoration to health is almost always a very slow process. Many months elapse before the health is reestablished; change of air, particularly removal to the sea-side; the tepid and afterwards the cold bath are useful in expediting the cure. A general enlargement of the uterus to a considerable extent is occasionally met with as a consequence of chronic inflammation of the substance of the womb, which in some cases rapidly subsides after a sudden and rather copious discharge of blood: these sanguineous effusions may always be considered as very favorable in every form and degree of the complaint.

An examination per vaginam, even at the early stage of hysteritis, will generally detect an alteration in the organ: it feels larger, fuller, and heavier, pain will also be increased by the pressure of the finger. This difference will of course be more readily distin-

guished by those who are in the habit of examining the unimpregnated uterus. Care is required not to mistake the sympathetic affection of the stomach for the original disease: many dyspeptic remedies are of a stimulating character, and would be highly improper in cases of inflammation.

INFLAMMATION OF THE OS AND CERVIX UTERI.

In the preceding pages, inflammation has been described as affecting the whole substance of the womb: cases are frequently met with, where the upper parts are perfectly healthy, the disease being confined to the mouth and neck of the organ. The general symptoms very closely resemble those of hysteritis, but they occur in a slighter degree. Patients complain of the same kind of uneasiness in the back and loins, great irritability of bladder, with derangement of stomach. A dull, heavy pain is felt at the upper part of the vagina, with an uncomfortable bearing-down sensation, this latter feeling often extending to the rectum. A white, opaque, slimy mucous discharge from the vagina is always present, the peculiarity of which will assist the practitioner in forming a diagnosis, as it is present in no other variety of uterine disease. In Sir

Charles Clarke's valuable work *On the Diseases of Females* it is thus defined:

“This discharge is opaque, of a perfectly white colour; and it resembles in consistence a mixture of starch and water made without heat, or thin cream: it is easily washed from the finger after an examination; and it is capable of being diffused through water, rendering it turbid.

“A morbid state of the glands of the cervix of the uterus probably gives rise to this discharge; at least the cases in which it comes away are those in which the symptoms are referred to this part; and when pressure is made upon it, the woman complains of considerable pain.”

In order to judge accurately, it is necessary, as Sir C. Clarke further observes, “To make the examination after the woman has been for some time quiet, as the common transparent leucorrhœal discharge will sometimes appear thick and white after exertion: this appearance is owing to a quantity of atmospheric air becoming entangled with it, but such a mixture of mucus and air will not render the water turbid with which it may be combined, and this forms a distinguishing mark between it and the white mucous discharge.” The great difference in the quantity will also assist in the diagnosis between this and

leucorrhœal discharge, the latter often flowing in very large, whilst the former always comes away in small quantities. After the disease has lasted for a length of time, this white discharge is no longer observable; the secretion becomes decidedly purulent, sometimes streaked with blood. In ordinary cases the diagnostic discharge is not seen, as the female at the beginning suffers little inconvenience, with the exception of a trifling degree of pain; this probably too slight to excite apprehension, or even attention, so that medical aid is seldom procured. Enquiry should be made into the early symptoms, and then it will be ascertained that the discharge was originally white.

A very careful vaginal examination is necessary before giving an opinion respecting the nature of the affection. The os uteri will be felt tumid, the lips feeling as though they were œdematous. Pressure generally increases the pain, but in many cases this is not very acute. The finger when withdrawn is found to be smeared over with purulent matter mingled with blood. The freedom of every part, excepting the os uteri, from disease, and the entire absence of fœtor, are sufficient to distinguish this inflammation from a carcinomatous affection of the womb.

From what has been already stated respecting

the few unpleasant symptoms which are present in the complaint, it is reasonable to conclude that in many cases recovery takes place without the medical man being at all referred to; at the same time it must be admitted that the consequences may be most serious; and therefore when the opportunity is afforded, means for arresting the progress of inflammation, or for removing its effects, ought to be adopted without delay. The functions of the uterus are not necessarily interrupted, at any rate until the disease has existed for several months, menstruation and conception not being interfered with at the more early periods.

Treatment of Inflammation of the Os Uteri.

The plan of treatment is very simple, and very successful if employed at the onset of the disease; it consists in adopting a moderately antiphlogistic plan. The author has never known it necessary to remove blood from the arm; in all cases the application of leeches to the os externum, or a little within it, will be required. Some persons are in the habit of inclosing the leeches in a tube, and carrying it up the vagina, so as to apply them to the os uteri itself, but the former is the preferable plan. The long-continued employment of fomentations is advantageous after the bleeding. Warm decoction

of poppies, or of conium injected into the vagina every four or five hours, has a remarkably soothing effect. The recumbent position must be strictly observed, the patient not being allowed to sit up before all uneasiness has subsided. Fecal accumulation would prove injurious on several accounts; at the same time, we must observe, that free purging is neither requisite or proper. A simple laxative that will act once or twice daily is all that is needed.

This then is the proper treatment for hysteritis in its recent stage; if the practitioner has not the opportunity of seeing his patient until a later period, he will have a much more obstinate complaint to deal with. In consequence of the continuance of the inflammatory process, chronic thickening of the os and cervix uteri takes place: if this condition of parts be not removed by appropriate means, and the female should become pregnant, great and serious obstruction to the passage of the child's head at the time of parturition must necessarily be the consequence from the difficulty with which the os uteri dilates. The author attended an extreme case of this kind many years since, in conjunction with his esteemed friend Mr. Doubleday, of Blackfriars Road; the sufferings endured by this patient were most agonizing, and will not soon be effaced from the writer's memory. For many hours the uterine

efforts were frequent and powerful, and but little progress made in the advancement of the labour: the os uteri felt like a thick cartilaginous ring, yielding to the pressure of the head with great difficulty. The obstruction was at length overcome, and a small foetus expelled.

Where this thickening is known to exist, it becomes a matter of great importance to effect its removal, that the unpleasant circumstances just adverted to be prevented: unless, however, the state of the case be properly explained to the patient, it can hardly be expected that she will persevere in the protracted plan of treatment, which is often required, especially as no pain is experienced, and her health may be unaffected. Mercury is the only remedy upon which any reliance can be placed for effecting absorption of this morbid thickening: the combination of *pilul. hydr. et ext. conii* before recommended may be had recourse to here; giving at the same time *decoct. sarsap. co.*, or, if needful, some more decided tonic. The mercury should not only be continued until a slight degree of ptyalism be induced, but this effect should be kept up for at least ten days or a fortnight: if the remedy be laid aside earlier the object intended will not be accomplished; should there be any remains of inflammation, the occasional employment of leeches will be necessary; but where there is simple thick-

ening as a consequence of previous inflammatory action, it is not advisable to remove blood.

The advantage derived from the mercurial course will sooner or later (for the time varies in different women) become evident to the touch: the part will be felt to be smaller and softer, until the os uteri at length regains its natural size and shape; and it is better not to discontinue the use of mercury until this complete restoration of parts has taken place, unless the constitution suffer from its continued employment: we can only proceed in this manner, however, with those who have been previously robust and healthy; in females of opposite habits, mercury frequently produces great irritation; with these iodine may be tried.

R. Potassæ hydriodat., gr. ij. ad gr. iv.

Aq. distillat., ℥ jss.

F. haust. ter die sumend.

The author perhaps ought to apologise for again pressing the necessity of careful attention to these cases; but he is anxious to do so, not only for the reasons already stated, but from a conviction resting upon his mind, that neglected chronic thickenings of the os uteri sometimes lay the foundation of genuine scirrhus diseases of the womb, where there is in the constitution a disposition or tendency to cancer, just in the same way as a blow or fall upon

the breast, by exciting inflammatory action, has been known to be the immediately exciting cause of carcinoma mammæ, where the latent disposition to that horrible disease had previously existed.

Common ulceration of the os uteri may be the result of inflammation, which, although not dangerous to life, is often very troublesome to the patient, and difficult of cure: the pain is of a smarting kind; the discharge is purulent, bloody, and often offensive, its quantity increased by being mixed with that of the vagina. Examination in the ordinary manner will generally discover the nature of the disease; or the speculum may be employed, an instrument of unquestionable utility in some cases, but often unnecessarily used. The common method of examination is offensive enough to the delicate feelings of a modest woman, and how much more must those feelings be shocked by a complete exposure of the person.

Perfect quietude in the horizontal position is an essential item in the cure of common ulceration: the vagina and os uteri should be well fomented with warm decoction of poppies or hemlock, thrown up by means of a syringe. These soothing applications in many instances are all that are necessary, the ulcer healing under their use: should it become indolent, a weak solution of nitrate of silver, or any

other slightly stimulating injection may be substituted. Regulation of the alimentary canal, both as regards *ingesta* and *egesta*, is also requisite.

Little abscesses in the glandular structure of the os uteri are sometimes produced by chronic inflammation of the part: their existence is ascertained by observing the vaginal discharge; it is purulent, and varies in quantity, being greater when the abscess bursts and first discharges its contents. The health is usually bad, and the habit strumous: constitutional means must be adopted for the relief of this condition: the topical applications are the same as have been recommended for common ulceration, namely, in the first place warm fomentations, and afterwards stimulating injections.

NEURALGIA OF THE UTERUS.

THE womb is the subject of a very painful disorder, which appears to bear a very close resemblance to those neuralgic affections so frequently met with in other parts of the body. This pain is much more severe than that which accompanies inflammation of the uterus, although it partakes somewhat of the same character, inasmuch as there is an occasional remission, though never an interval of perfect ease. So far as the author's experience enables him to judge, the malady usually attacks women of an excitable and nervous temperament, who are liable to hysterical affections, and suffer from painful menstruation.

The pain is felt at the lower part of the body, darting through the pelvis to the back, and extending to the thighs: there is a distressing sensation of dragging and bearing-down, rendering the female incapable of any exertion; if she persist in moving about, her sufferings are greatly increased, and she finds herself in consequence compelled to lie down: this alteration from the upright to the recumbent

posture commonly gives relief, but by no means removes the pain altogether. Women who are naturally irritable, experience a greatly increased degree of excitability during the menstrual flow, and it will be remembered that there is at this period a larger supply, or as it may be called, a local determination of blood to the womb. These facts afford a satisfactory explanation of the reason why the pains are so greatly aggravated at this time; in some cases they amount to perfect agony. The author never in the whole course of his practice witnessed a case of more acute and intense suffering than the one he is about to relate.

This patient was a lady about twenty-six years of age; she had been afflicted with uterine neuralgia for several years, and the period of menstruation was approaching. On being visited, she was found sitting on her chair, suffering pains far more severe than those of labour: she had repeated rigors: the body was of an icy coldness, and the stomach rejected everything presented to it. She remained in this condition for about six hours; menstruation then supervened, and she was relieved, though not by any means free from pain. She had been long under medical advice, had been married three years, but had borne no child; indeed, her medical attendant had confidently told her she never would become a mother. This lady had suffered so severely,

that she was willing to submit with patience to any plan proposed for her relief: after the lapse of four months, we had the satisfaction to pronounce her cured; she experienced no uneasiness, even at her monthly periods, soon afterwards became pregnant, went to the full term of utero-gestation, and was delivered of a fine healthy child: she is now *enciente* for the second time. One circumstance has been omitted in the detail of symptoms; namely, that the os externum and vagina were so constricted as not to admit the point of the finger without difficulty.

Although the sufferings attendant on this variety of uterine affection are so acute, yet at the commencement the vascular system is not much affected; the general circulation remains tolerably tranquil; it should be remembered, however, that whenever patients from any cause are subject to long-continued and violent pain, the constitutional powers will at length fail, and then there will be a more frequent and powerless state of the pulse. The general aspect of females who are the subjects of this disease varies; in some there is a pale and chlorotic appearance of the countenance, whilst in others a clear red-and-white colour is observable, together with that peculiar brightness and animated expression of the eye which is so often witnessed in hysterical habits.

In consequence of the continuance of pain, it is not unlikely that, prior to an examination, suspicions will be excited that the uterus is affected with some disorganizing disease; but with this exception as regards pain, they have no symptoms in common. The womb when examined will in some cases be felt in its normal condition, there being no perceptible alteration either in size or shape, or it may be slightly enlarged, with a tumid state of the os uteri: whether there be enlargement or otherwise, there is an exquisite degree of sensibility, the slightest pressure producing an acuteness of pain never experienced even in the most malignant diseases of the womb. The vagina is occasionally involved in this state of irritability, as in the case just detailed; at other times it is perfectly free, the introduction of the finger giving no pain until the womb itself is reached. A leucorrhœal discharge, varying greatly in degree, is an occasional concomitant, and the stomach is usually sympathetically affected: there is loss of appetite, nausea or vomiting, and a general failing of strength. These then are the symptoms which characterize uterine neuralgia, we shall in the next place describe its appropriate treatment.

Treatment of Uterine Neuralgia.

In the treatment of neuralgia of the uterus, the first indication is the endeavour to procure some alleviation of the pain, and this will never be accomplished without strict attention to the position of the body. The female must on no account whatever be suffered to rise from the horizontal posture: all attempts to relieve will assuredly fail, without an unhesitating compliance on the part of the patient with this recommendation; if she prove refractory in this respect, it is far better not to undertake the case at all. It may be observed, however, that in general her own feelings will bear testimony to the propriety of the plan; and therefore in the more severe cases, at any rate, no opposition will be offered. Our own conviction is, that the same posture is equally necessary in the milder forms of the disorder, to prevent the symptoms increasing in severity. The recumbent posture, then, is the first and most important of all remedial measures.

If an examination per vaginam should discover a tumid condition of the os uteri, local abstraction of blood may be had recourse to: ten or fifteen leeches applied to the vulva, and the bleeding encouraged by the use of warm fomentations, will generally

procure a certain amount of relief, though in some instances this will be comparatively small. Even where there is no tumefaction, if the pain be very severe and the constitution unimpaired, the application of cupping-glasses to the lumbar region, or leeches to the os externum, will still be advisable; the latter method in a large majority of cases is the best to be adopted. The author has never known it necessary in his own practice either to cup, or bleed from the arm, although he would be unwilling to assert that such practice is never requisite; he can easily imagine a case (although he has not witnessed it) where these means may be employed with advantage for the reduction of vascular action in the system generally; unless there be power as well as increased action in the circulation, it is better not to remove any large quantity of blood.

A soluble state of the bowels should be preserved, the medicines employed for this purpose being the mildest that can be selected: great care is to be observed not to irritate the intestinal canal by the exhibition of drastic purgatives; these act in an unfavorable manner on the uterus itself, and on the constitution also, for they would necessarily tend to reduce the general strength of the patient, which it is most material to preserve. The daily use of a mild enema will answer the purpose better than any aperient by the mouth.

Anodynes are always required for the relief of pain; a full opiate should be given at night to procure sleep; a sufficient quantity of the acetate or muriate of morphia may be prescribed; very small doses are useless in these cases. Extract of belladonna sometimes affords a remarkable degree of relief when given in neuralgic affections; from a quarter to half a grain may be safely prescribed, to be taken every four hours. If there is reason to suppose a certain degree of inflammatory action present (for the two diseases are not incompatible), a mild mercurial course should be instituted. Careful investigation is required before this plan is adopted, for if mercury does no good, it will certainly do harm: in our own practice we have not, upon the whole, derived much benefit from this metal, unless given in merely alterative doses.

Where, as is generally the case, the constitution appears to be giving way, this marked by a rapid and feeble pulse, pallid countenance, cold extremities, weight over the eyebrows, &c., the remedies employed should be tonics, and those of a most decided character, and of this class the various preparations of iron are the most useful. It has been before stated, that where the use of this metal is indicated, the sulphate will be found in most instances to be a very efficacious preparation, and not

offensive to the palate, as it may be given in pills with the extracts of chamomile and gentian.

R. Ferri sulphat., gr. j. ad gr. ij.
Ext. gentianæ
— anthemid., āā gr. iij.
F. pil. ij. sextis horis sumend.

A lengthened perseverance in the use of these remedies is always required, and for this the patient's mind ought to be prepared, as she will be grievously disappointed if she expect a rapid recovery. An occasional substitution of some other tonic is often necessary, but as a general medicine more reliance may be placed upon iron. Nutritious food, with small portions of stimulating drink, should be cautiously administered, their effects being under the close observance of the medical adviser; removal into a purer air, where practicable, greatly assists in the restoration of the general health; probably a sea voyage would, of all other means, be best adapted for this purpose, the recumbent position being at the same time kept to.

It is very difficult to determine the exact time when the patient may be permitted to rise from the couch—no complaint is so liable to a relapse—it has often been caused by very slight exertion. It is unsafe to allow her to walk about whilst any

pain remains; and under the most favorable circumstances she must make an attempt with great caution, almost, it may be said, with fear and trembling, and if upon trial, these slight movements of the body produce any pain, they must be immediately desisted from, and the old position rigorously adhered to. During the early stages of the complaint, the hip-bath will sometimes give relief, but as its frequent repetition tends to increase debility, it should not be *often* employed, unless it be followed by a very decided mitigation of pain.

TYMPANITIS UTERI.

Physometra.

The formation and detention of air in the uterine cavity constitutes that peculiar disease called tympanitis uteri, or physometra. After a certain degree of accumulation the womb contracts, and the air is suddenly expelled, sometimes with an audible noise. Cases are recorded wherein, from want of irritability of the uterus, the organ has so greatly enlarged that pregnancy has been suspected. Physometra is a painful, and very harassing disease, its very nature prevents the subject of it appearing

in company, for as the uterine contractions are involuntary, she of course possesses no power of controlling them. The constitution of those who labour under this disease is delicate and weakly; a collection of air in the cavity of the womb not being the only symptom complained of, but one in common with many others.

The air appears to be a secretion from the inner membrane of the womb, for if pregnancy occurs, the disease is for a time, if not permanently, cured. The author has seen no case of genuine physometra during the pregnant state. We know, indeed, it has been asserted by some, that these explosions of air occasionally take place at the time of labour, and we have known air to be suddenly forced away from the uterus, by the parturient efforts of the organ; but in our own practice, this has not been the result of disease; it has been invariably produced by the extrication and expulsion of gas formed in consequence of incipient decomposition, the foetus having been in every instance dead. Moreover, it is possible, without care, for us to mistake the source from whence the air proceeds, wind being often forcibly ejected from the rectum when the woman is in strong labour.

Treatment of Physometra.

The treatment of tympanitis uteri may be resolved into two indications—first, to restore the tone of the system generally, and secondly, that of the womb in particular. A very gentle laxative should at first be employed, which is to be repeated as occasion requires ; after which, the tonic plan in its fullest extent must be adopted. In most cases, from fifteen to twenty minims of the muriated tincture of iron, given in any aromatic menstruum will be found an efficient remedy ; or any other medicine of the same class may be substituted, where iron disagrees with the stomach or bowels. If hysteria, in any of its multiplied forms, should manifest itself, relief will generally be obtained from the following draught :

R. Tinct. valer. ammon.
Tinct. cardam. co. āā 3 j.
Mist. camph. vel aq. menthæ pip. ʒ jss. M.

Removal to a different air, and in the neighbourhood of some chalybeate spring, where the patient may have the opportunity of “ drinking the waters ” is another remedial measure of great efficacy ; she should, however, be recommended rather to travel about than to remain long in one place. Exercise

is also necessary, but fatigue must be avoided. Riding on horseback is in most cases to be preferred. The second indication is fulfilled by directing an astringent solution to be injected into the cavity of the uterus; this may very conveniently be effected by the aid of the elastic bottle and curved pipe, heretofore spoken of as useful in certain cases of menorrhagia: about three grains of sulphate of zinc dissolved in an ounce of distilled water will form an injection of sufficient strength to begin with, increasing it afterwards, if requisite. The patient's mind may be tranquillized by being assured there is no danger whatever, so far as the womb is concerned, that the source of her annoyance is a deranged condition of the general health, and consequently when one improves the other will also.

CALCULUS IN THE UTERUS.

OF this affection the author has seen no example ; he mentions it on the authority of Burns, who states that earthy concretions sometimes form within the womb. The presence of calculus will, of necessity, be the cause of much uterine irritation, accompanied by the usual sympathetic affections. If allowed to remain, inflammation and ulceration are the consequences. Examination of the os uteri is the only method of detecting its presence, and for this purpose either the finger or a probe may be used. If within reach it should be removed, attention being at the same time paid to any particular symptom which may arise. A case is related by Gaubius where calculus was complicated with prolapsus uteri. After a length of time severe pains came on, and in an hour a large stone was expelled ; next day a larger stone presented itself, but could not be brought away until the os uteri was dilated. From time to time after this, small calculi were expelled, but at length the female recovered.

WORMS IN THE UTERUS.

In a few rare instances, after considerable irritation of the womb, combined with fætid discharge, worms have been discovered passing away with the secretion : the treatment consists in the injection of strong decoction of aloes, or of some bitter infusion, as wormwood, &c.

MOLES.

The term mole has been very injudiciously applied to denote various productions of the uterus. These products or excretions differ totally in their nature, and therefore ought not to be classed under the same name, for example, a polypous tumour, a blighted ovum, hydatids, a peculiar flesh-like substance occasionally formed in the womb, have all in their turn, been designated as “moles ;” Vogel’s definition is the following : “*MOLA—massa carnea, vasculosa, ex utero excreta—ovum deforme.*—The author restricts the term mole to those masses resembling flesh, which may form independently of sexual intercourse, and are now and then found in unmarried females ; this, however, is a rare occurrence.

Of these moles there are two distinct varieties: the first is nothing more than a coagulum of blood, which has been retained for some time, perhaps for several months, in the cavity of the uterus; it acquires a firm consistence in consequence of the separation of the more fluid parts, so that when expelled it appears composed principally of fibrine; its nature is easily determined by careful inspection.

The second variety seems to be an unnatural production of the organ, varying in consistency; being hard in one case, soft in another; there may be a large single mass, or several of smaller size; these have a vascular as well as a cellular connexion with the womb, and hence hemorrhage frequently occurs in moles of this kind. If the subject of this disease be married, pregnancy will, in all probability, be suspected, as there will be suppression of the catamenial flow, enlargement of the abdomen, and perhaps those sympathetic affections of the breast and stomach, which are the usual concomitants of uterogestation. There is enlargement of the uterus from the increase of the substance within, until at length its parturient action becomes excited, the woman experiences strong bearing-down pains, by means of which the moles are expelled, a very alarming hemorrhage sometimes attending the expulsion.

The author is indebted to Mr. Bond, of Stoke Newington, for a very interesting specimen of mole ; when expelled, it presented the appearance of a large thick mass of fibrine. This substance had been retained for some months within the uterus, and was expelled with strong pains ; the patient lost much blood. She had previously considered herself pregnant.

Treatment of Mole.

Where no alarming symptoms are present, the practitioner will do well not to interfere ; but fearful and dangerous hemorrhages frequently supervene ; the usual means for arresting floodings should be employed in these cases without delay, namely, cold applications, the use of friction, the internal exhibition of *secale cornutum*, &c. ; should these means fail, and the *os uteri* be dilated, the hand must, as a last resource, be introduced within the uterus, and the entire mass brought away. If this cannot be effected in consequence of the rigidity of the parts, the temporary use of the plug would be of service, not only by restraining bleeding, but it would also stimulate the womb to more powerful contractions, and thus secure the expulsion of the mole.

HYDATIDS.

The disease called Hydatids is not a peculiar production of the uterus, it is often found in other parts of the body; nor is it confined to the human subject; some animals, the sheep especially, are frequently affected by it.

Hydatids, according to the Linnæan system, constitute a tribe of the genus *tænia*, belonging to the class and order of intestinal worms. They are characterized by being furnished with a vesicle, which is sometimes attached to them posteriorly, or in which some of them are altogether inclosed. Sometimes there is one hydatid only, but more generally they are seen hanging together in clusters; each little vesicle is attached to its fellow by a very delicate filamentous thread, the whole presenting an appearance very similar to a bunch of grapes. They are connected to the lining membrane of the womb by a thickish substance, resembling fibrine, but which has a bloody appearance when first discharged from the uterus. The size of these vesicular bodies varies, some are *very small*, whilst others are as large as the egg of a thrush; when macerated and perfectly freed from blood they are

usually colourless. Dr. Baillie, however, states that he has in many cases seen hydatids of the liver of a pale amber colour.

Plate I. represents very accurately a bunch of hydatids in the possession of the author; they are all of small size, though some are larger than others, the thick substance at the upper part of the engraving is a portion of fibrinous matter which originally connected the mass to the uterus; the reader is requested to notice the fine filament which connects one vesicle with another, forming a sort of connecting medium between them all. This portion was expelled from the uterus by the natural contractions of the organ after severe hemorrhage, the patient eventually recovering.

Different opinions have been entertained with regard to the formation of uterine hydatids. As they generally exist in connexion with a dead ovum, some have attributed their origin to this circumstance, whilst others believe the death of the ovum to be the effect of hydatids previously existing in the cavity of the womb; that in fact these animalculæ were the actual devourers of the fœtus. Dr. Blundell, the late talented lecturer at Guy's Hospital, used to exhibit a preparation showing the progress of this work of destruction.

Some physiologists deny altogether the existence of uterine hydatids as a distinct and separate disorder, considering what has been usually so designated to be a diseased condition of one of the membranes of the ovum (the chorion); and this opinion is somewhat strengthened by the fact that hydatids of the uterus generally exist in combination with pregnancy. The author is not aware that unmarried females have ever been known to be the subjects of these growths, although he should feel great hesitation in pronouncing this to be an impossible occurrence. He does not coincide in the opinion just expressed, that these vesicular bunches are nothing more than morbid enlargements of the chorion; that they are not always thus produced, is proved by a preparation in his Museum, a representation of which is given in Plate II. The points worthy of notice are, first, a general enlargement and thickening of the uterus; secondly, the existence of little hydatid vesicles throughout its entire substance; thirdly, the projection of a few within the cavity of the womb, situated behind, and covered by the mucous membrane. These appearances could not possibly be caused by any morbid alteration of the chorion.

We have just stated that married women are very generally the subjects of this disease, and that they are not only married but in a state of

pregnancy; the symptoms at first are those which are attendant on this condition, but after the death of the ovum the signs of pregnancy disappear. The uterus, instead of diminishing, increases in size, in consequence of the enlargement of hydatids within its cavity, and therefore it often happens that the medical man, as well as the patient, is deceived, as they imagine pregnancy to be still advancing. There is this marked difference however between the two: the enlargement which results from conception is slow, whilst that from hydatids is very rapid. Again, there is the absence of the sensation called "quickenings," although there may be a kind of indistinct flutter perceived by the patient herself, probably caused by flatus; or perhaps it depends upon some power of contraction inherent in the hydatid. Sir Charles Clarke states that although hydatids in other parts have that power, yet it has never been observed in those of the womb; it however by no means follows that because they have not been seen to contract *out of the body*, that they never contract *within it*; a presumption to the contrary may be fairly entertained. It may be further observed, that with the increasingly tumid condition of the abdomen, the correspondent changes in the breasts, so frequently observed in pregnancy, are not apparent, for they become flaccid, diminishing rather than increasing in size. The uterus, when examined through the

abdominal coverings, will be felt to be enlarged, but it does not oppose so firm a degree of resistance to the hand as the impregnated womb ; and in some cases, where the parietes of the organ are preternaturally thin, an obscure sense of fluctuation may be easily felt.

The usual symptoms of uterine irritation are present in this disease, namely, pains in the back, loins, and fore part of the pelvis ; the stomach is affected ; there is loss of appetite, nausea, or vomiting. As the womb increases in size, various unpleasant symptoms, which are the mere mechanical effects of pressure, will be produced ; thus the functions of the bladder and rectum will be obstructed. Attention to these organs forms a very important part of the practitioner's duty ; it is probable that several months may elapse before symptoms demanding any but palliative measures manifest themselves.

It is thought by some, that there is a disposition in the uterus to remain in a quiescent state during nine months, the usual term of gestation : our own experience does not corroborate this opinion ; the time when its extraordinary action is excited appears to depend principally if not entirely upon the degree of irritability present in the womb. In some women a greater distension will be borne

than in others, before this contraction takes place. Before this time, there is a discharge of pale limpid fluid, resembling water, without colour or smell; this effusion is especially noticed if the female makes use of much exertion, or be subjected to any sudden shock, such as a blow or fall: it arises from the bursting of the vesicular sacs, and the consequent discharge of their watery contents. These discharges occur in gushes, and at intervals only, a circumstance worthy of remembrance, because it will assist in forming a correct diagnosis, as there is another disease, hereafter to be described, called cauliflower excrescence, in which the passage of water from the uterus forms a very prominent symptom, but in this latter affection the discharge proceeds from the vagina in a constant and uniform drain, and not in occasional gushes. Hydatids may be distinguished from those large and frequently repeated effusions of water—which now and then take place for weeks, and sometimes for months during the pregnant condition, and which seem to arise from some disease of the membranes of the ovum—by observing that all the symptoms of pregnancy, except enlargement, have disappeared, a subject which has already been referred to. It may be noticed, in passing, that although the membranes are not in a sound and healthy state, yet these discharges do not materially interfere, either with the general health of the individual or

with the process of gestation. It may probably be asked, why disease should be inferred if no inconvenience be necessarily produced? Our opinion is formed from the two following circumstances: first, because these effusions are not natural, and secondly, in these cases the placenta is often morbidly adherent to the sides of the womb.

After an uncertain period of time the distension of the womb is such as to produce an active state of contraction, when, from the bursting of the vesicles, water is discharged in abundance; but it is not water only; for at this period it is usual for a very alarming and dangerous hemorrhage to supervene, sufficient to place the life of the patient in immediate and imminent peril, and if it be not speedily arrested her destruction is certain. If any doubts had previously existed regarding the true character of the disease, they may now be set at rest by examining what is passing away, for by the contractions of the womb the filaments or stalks already described as connecting the vesicles together are broken off, and hence bunches of unbroken hydatids are seen mingled with the water and blood.

It is probable that the medical man will not be consulted before these alarming symptoms come on, and he therefore finds himself suddenly called upon

to act in a case of great and urgent danger, where the utmost promptitude of treatment is required.

Treatment of Hydatids of the Uterus.

There are no known remedies which will prevent either the formation or growth of uterine hydatids, nor do we possess any means whereby we can procure their expulsion in the more early months. All that can be done is to explain to the female the nature of her disorder, to attend to any symptoms that may arise, and patiently wait until the efforts of the uterus are excited in consequence of distension: the sooner this contraction occurs the better will it be for the patient, as the blood-vessels increase in proportion to the enlargement of the substance within the uterus, and therefore are smaller in the early periods. The os uteri *considerably dilates*, so that the finger can be introduced within it, and the hydatids distinctly felt. If the hemorrhage be not alarming, no interference of this kind is either necessary or proper; the main object of the practitioner is to control the hemorrhage; to this purpose all his efforts must be directed. The flow of blood is in many instances so excessive, that the life of the individual is in great jeopardy, the gushes being as profuse as during the puerperal condition; indeed, they appear to be more

excessive, from the large quantity of water mixed with the blood. In the attempt to restrain these bleedings, it should ever be remembered that the only effectual method consists in exciting a general, perfect, and permanent action of the muscular fibres of the uterus, without which a renewal of the hemorrhage is certain. Confinement in the recumbent position is imperatively required, and every circumstance carefully avoided which is likely to excite either bodily or mental excitement. In some cases (that they are rare must be admitted) this plan of treatment, with great attention to diet, is all that is necessary, especially where there is powerful action of the uterus; of course, no nutriment of a stimulating kind should be allowed, and everything received into the stomach nearly or quite cold, as caloric has a powerful tendency to excite the action of the heart and arteries. The application of cold has a very powerful effect in arresting hemorrhage; a bladder containing pounded ice should be laid over the lower part of the abdomen, or a piece of ice may be introduced into the vagina, by which a sudden contraction is often induced.

The ergot of rye may be employed in these cases with some degree of confidence; it is much more likely to succeed than in menorrhagia. From what the author has seen of this remedy he infers that its action cannot with any degree of certainty be

calculated upon, unless the uterus be developed and endowed with its *extraordinary* powers of contraction, nor even then unless that action has been already excited; in other words, that it will never produce, although it will increase when already present, the parturient efforts of the organ; and hence it follows that even during labour, when there is complete suspension of the pains, its effects are by no means so certain as when they are regular though trifling in degree: the medicine seems to have no power of communicating *irritability* to the womb. In the disease under consideration, however, there is a developed condition, and there are also regular expulsatory pains; the exhibition of ergot, if it act favorably, will increase those efforts, and procure a more rapid expulsion of the diseased mass, and thereby obviate the danger to be apprehended from a continuance of the hemorrhage. About half a drachm of Battley's solution should be administered at occasional intervals: the medicine may be taken in any convenient vehicle.

Discretion is required in the use of stimulants: they are altogether inadmissible in the early stages, before the discharge of blood becomes alarming; and even in the more copious hemorrhages where a tendency to faintness has supervened they should not too hastily be had recourse to, for under these circumstances not only is the momentum of the

blood greatly diminished, but that fluid coagulates much more speedily. By this coagulation clots are formed, which act as plugs to the bleeding vessels, restraining if not altogether suppressing the further irruption of blood. Now the obvious effect of a stimulus would be to excite the arterial circulation, in all probability the removal of these coagula would be the result, and a repetition of the hemorrhage the unavoidable consequence. These observations are not intended to convey a general condemnation of all stimulants; we shall seldom if ever be enabled altogether to dispense with their use, but the author wishes to impress upon the minds of his readers the propriety of waiting until symptoms really demanding their employment have manifested themselves. When hemorrhage has continued for a lengthened period, and the attacks of syncope become frequent and formidable, a stimulant is peremptorily required; without it the patient in many instances would never rally. A tablespoonful of ardent spirit (brandy is to be preferred) should be given undiluted, or mixed with part of the yolk of an egg, and repeated at such intervals as the peculiar case may require.

A well-applied plug is productive of great advantage where the uterus is not much increased in size, and especially if its mouth be nearly closed: this will not only assist in restraining the flow of blood,

but by its presence in the vagina will stimulate the uterus to action, thus affording permanent as well as temporary relief. Pressure over the uterine region should be maintained by the application of a pad tightly bound round the lower part of the abdomen; a small book enveloped in a napkin forms an excellent pad for this purpose, and this is one which can be obtained without any delay, which is of great advantage in cases of such emergency.

Notwithstanding the assiduous employment of all these means, there are cases in which the dangerous symptoms continue or increase, and the constitutional powers of the female seem to be rapidly sinking. This will be manifested by repeated attacks of syncope, by a general coldness of surface, by a rapid and feeble pulse, combined with that pallid and peculiar cast of countenance exhibited in hemorrhagic patients: in this extreme form of the disease, *manual interference* becomes necessary. As soon as the os uteri is dilated sufficiently, the hand is, with great caution and gentleness, to be introduced within the cavity of the womb, and the hydatids carefully separated from their attachment, taking especial care that the whole mass be removed before the hand is withdrawn. This operation is attended, not only with difficulty, but with some degree of hazard, and this will be increased if the attempt be made too early, the womb not

being in so dilatable a condition as at the time of labour, and therefore resists rather than yields where force is applied ; if Dr. Blundell's motto, "*Arte non vi,*" be disregarded, rupture of the uterus might possibly (perhaps probably) be induced.

After-Treatment.

When all the hydatids have been expelled by nature, or removed by art, the patient is to be treated precisely in the same manner as if she had been recently delivered, and her labour complicated with hemorrhage. The bandage around the abdomen must be tightened, and no change of position allowed. Our feelings sometimes get the better of our judgment in this respect, for in consequence of the oft-repeated desire expressed by the patients, we sometimes permit the change. This restlessness is merely the effect of hemorrhage, and will not be relieved by any change of bodily position ; even were it otherwise, perfect quietness must be enjoined, as the vital powers may be so exhausted, that a movement, if only from one side to the other, would probably produce so much agitation, that fatal syncope would be the result. When the circulation has become more tranquil, the female is to be placed comfortably in bed, the practitioner himself being in the room to superintend and give the necessary

directions to the nurse, as so much depends upon this process being properly conducted; in many cases hemorrhage has been renewed where the necessary caution has not been observed.

After hydatid disease there is sometimes a free secretion of milk, which soon subsides on the use of an aperient. It is often necessary, in consequence of extreme debility resulting from this affection, to employ tonics and cardiacs for a long space of time, a return to health and strength being very protracted and tedious. Everything likely to increase tone in the general system is here required; of course all local stimuli must be avoided.

SINGLE HYDATID OF THE UTERUS.

Hydrometra—Ascites Uterinus.

“There are upon record,” says Dr. Denman, “many histories of this dropsy, which is described as a collection of water, or thin gelatinous fluid in the cavity, the os uteri being so firmly closed as to prevent its escape.” The doctor, however, in common with other practitioners who have directed their attention to uterine diseases, is not inclined to believe in the existence of cases of this kind: it is

difficult to conceive how large collections of water can take place in the womb, as this organ communicates with the os externum by an open mouth, and consequently the fluid must escape as fast as it is secreted. Moreover, it has been observed in several instances, that after the water has escaped, a membranous bag has been expelled, which, on being blown up with air, put on the form of the womb, appearing as though it originally constituted the lining membrane of that organ. From this circumstance it has been considered probable, that what was designated uterine dropsy by the older authors really belongs to a class of hydatid disease, the difference being this, that instead of being made up of bunches of small cysts, there has been a single one of large size, sufficient to distend the entire uterus very considerably. Cases of this kind are but seldom met with. Sir Charles Clarke states in his book that he has never seen them.

The symptoms which mark this disease are most likely to be mistaken for pregnancy. There is suppression of the menses, sympathetic irritation of stomach, enlargement and uneasiness in the breasts, with increasing tumidity of abdomen. The author cannot better describe these symptoms than by relating the only case which has come under his personal observation. This lady was under the immediate care of his esteemed friend, Mr. Austin, of

Red Lion Street, Clerkenwell, who was engaged to attend her during, as she supposed, her approaching confinement; the uterus increased in size for several months, then labour-pains came on, when Mr. A. was sent for, his patient believing she was about to miscarry: after a while the bag ruptured, an immense quantity of fluid, resembling water, (amounting, according to her own account, to a pailful,) passed away, and the womb returned to its original unimpregnated size. This female soon recovered, and has since borne several children. The history of these cases may be summed up in a few words. The uterus enlarges to a greater or less extent; contraction then takes place, and the watery contents of the bag are evacuated; lastly, the cyst itself is forced away. This variety of hydatid growth is free from danger, as there is no attendant hemorrhage, and on this account, the doubt which probably existed with respect to the nature of this affection prior to the occurrence of uterine action, will be of little consequence, as no particular treatment is requisite. It is proper to enquire into the general health, and to apply such remedies as the peculiar case may demand. Where hydatids grow in clusters, the disease, at some future day, is likely to be renewed; whereas, if the cyst be single, its expulsion generally completes the cure, the female being ever afterwards free from the complaint. The proper functions of the uterus are for a time only interrupted.

MALIGNANT ULCER OF THE WOMB.

Corroding Ulcer—Ulcus excedens.

The os and cervix uteri are occasionally the seat of ulceration, which, from its character, has been termed "malignant," although it differs materially from what are usually called the malignant diseases of the body, namely, cancer, and hematoid fungus. Women are seldom the subjects of this ulcer at an early period of life; it is seldom seen prior to the age when the monthly function of the womb ceases. This observation is applicable to most of the other dangerous varieties of uterine complaints, for as long as the local flow is continued, the tendency to morbid action does not develop itself; but when the vessels are no longer relieved by the evacuation, the hitherto latent germs of disease begin to manifest themselves, and unless checked by appropriate treatment, soon acquire a fearful degree of maturity.

The symptoms preceding the formation of ulcer are too frequently those which excite no alarm in the mind of the patients, particularly as they expect many uneasy sensations at "the turn of life." A

sense of heat in the vagina may be mentioned as one of the earliest signs, varying greatly in intensity: in some hardly deserving the name of *heat*, the natural temperature being but slightly increased, whilst in others, the sensation is described as being almost intolerable. A thin acrimonious discharge is also noticed, its quantity sometimes small, but in quality remarkably irritating, so that unless cleanliness be observed, the surface over which it flows becomes inflamed, and afterwards excoriated; soon, however, this discharge presents a peculiar and sanguineous appearance, and is highly offensive to the smell. As the disease advances there are occasional hemorrhages to a serious extent, produced in consequence of the coats of the vessels being destroyed by the ulcerative process.

The constitution soon gives way under these repeated drainings, the face becomes pale and sallow, muscular strength is diminished, the pulse feeble and rapid, and, in short, all the usual symptoms indicating prostration of the powers of life are observable. Pain uniformly attends this variety of uterine disease, but it is of a peculiar kind. When we speak of cancer, we shall take occasion to repeat the observation now about to be made respecting the different kind of pain experienced in the two diseases. In cancer, intense and agonizing pains are experienced, and these are described of a

lancinating or stabbing character ; in the malignant ulcer they are designated as being of a burning or scalding kind, so that even before an examination a tolerably accurate opinion may be formed whether the patient be suffering under cancerous or malignant ulceration.

This ulcer commences in that portion of the vaginal membrane which is reflected over the mouth of the womb, quickly extends over its whole surface, and penetrating the parts beneath, soon destroys the os uteri: the cervix is next attacked, and in some cases the female has survived until nearly the whole womb has been destroyed by the ulcerative process. The author has known this ulceration to have spread to a very considerable extent without producing any inconvenience, or at any rate without impressing the patient's mind with the necessity of sending for professional advice. He has a preparation in his possession where the disease was not suspected during the lifetime of the sufferer, but a post-mortem examination showed the os and a large portion of the cervix uteri to have been removed by ulceration. Plate III. represents the uterus affected with this malignant ulcer ; it will be seen that the mouth and neck have been removed by ulcerative absorption, but at the upper part of the organ there is not the slightest apparent

deviation from the healthy condition ; there is neither enlargement, discoloration, nor thickening. It is this circumstance which characterizes in so striking a manner this variety of uterine ulcer. When an examination per vaginam is made, the extent to which absorption has taken place is easily distinguished by the touch, but every other part seems to be healthy. In some of the worst cases where the bladder and rectum have been involved in the ulceration, there has been no thickening of the adjacent parts. In very few instances, however, does this ulcer extend beyond the womb itself.

Treatment of Malignant Ulcer.

When ulceration of this kind has once occurred, the powers of nature are never able to restore the part to its natural condition ; this is the concurrent testimony of our most celebrated practical writers on the subject. Sir Charles Clarke observes, “ when once the ulcerative process has commenced in this disease, the part attacked by it never, as far as the author’s experience has gone, recovers its healthy structure, but increased action of the blood-vessels of the os uteri, which would eventually terminate in ulceration, may, probably, be

diminished or controlled, so that the ulceration may not take place, and by such a mode of treatment much advantage is gained."

Another writer states, that although the cure of this ulcer is exceedingly difficult, and notwithstanding "it is nearly as difficult as cancer itself," yet it has been cured by mercury alone, or combined with hemlock, hyoscyamus, or other narcotics. Our own opinion coincides with that of Sir Charles Clarke's, just quoted; great and urgent therefore is the necessity of attending to the symptoms antecedent to the formation of ulcer. We believe that this and most other species of malignant disorganizations of the uterus arises from the same exciting cause: that inflammation is the *fons et origo mali*; that is not essentially specific in its character, but observes the same laws, and yields to the same treatment as any ordinary case of inflammation; that the specific character which the disease afterwards assumes depends not upon the application of any peculiar exciting cause, but that the character of such disorder is determined by the tendency which exists in the individual constitution; and lastly, that, therefore, the same immediate cause will produce in one, common inflammation; in a second, malignant ulcer; in a third, tubercle; in a fourth, cancer; and so on. If this opinion be correct, it behoves us never negligently to pass over,

but rather on the contrary, carefully to attend to the slightest symptoms of uterine uneasiness, more particularly if they make their appearance when the menstrual discharge is about finally to cease ; by so doing many valuable lives will be preserved, and much suffering averted.

We have already stated that in some females the catamenial secretion gradually lessens, and at length, by degrees disappears without any uncomfortable sensation being experienced ; this, however, though “ a consummation devoutly to be wished,” is not often the case, for almost every female, even where there is no disposition to malignant disease, feels some annoyance at this period, and as it may not be known beforehand to what affection the constitution is predisposed, it is the safer plan to pay the same attention to what perhaps may be considered trifling symptoms, as if it was certain that life or death would be the immediate result of the remedies employed. If then a female at the age of forty-five should complain of heat in the genitals, pain in the back, dragging sensations about the hips, difficulty or pain in passing urine, with or without tenesmus, she ought not to be dismissed with such a sentence as this, “ Well, Madam, you must expect all these uneasy feelings at this particular time, but if you have patience, they will subside.” True, they *might* disappear, but it is

equally true that these symptoms are often the forerunners of fatal disease, and therefore we repeat, that it is better to consider such a case to be one of threatened malignancy, and to treat it accordingly. Removal of blood naturally suggests itself to the mind as likely to relieve incipient inflammatory action: in those of plethoric habits, where there is force as well as frequency in the arterial circulation, bloodletting in the usual way from the arm is proper, but in most, cupping the loins, or leeching the vulva will be sufficient; the latter method, as tending to empty the vessels in the immediate neighbourhood of the disease, is attended with great advantage; after the lapse of a longer or shorter interval, the operation should be repeated. If after applying leeches discharge of a leucorrhœal character should make its appearance, we may regard it as a favorable sign, and ought not to endeavour to check, but rather to encourage the secretion.

Purging to a moderate extent is necessary, and for this purpose the alkaline aperient may be prescribed (vide p. 94), with or without the tincture of hyoscyamus. Although powerful purgatives will, in many cases, have the effect of quickly reducing inflammation, yet, from the proximity of the rectum to the womb, they are here inadmissible; drastic purgatives, it is well known, will not only

irritate the bowel, but the uterus also, and are therefore improper. A warm hip-bath, the temperature of which is not very high (from 90 to 95 degrees), should be used every evening, the immersion to be continued until a slight degree of faintness is beginning to be felt; after this a sufficient quantity of any anodyne may be administered, in order to procure sleep for the night. Long-continued fomentation of the part itself often relieves pain; decoction of poppies or hemlock may be used for this purpose; it is easily thrown up the vagina by means of a syringe; the diet must be abstemious, and everything which excites the action of the parts avoided: should the female be married she should be advised to separate for a time from her husband.

This treatment will, in many cases, be successful, if the opportunity be afforded of putting it into practice before ulceration has taken place; when the ulcer has actually formed, slight indeed are the hopes of cure, although by proper management a certain amount of relief may be obtained.

It is of the first importance that the offensive discharge be removed from the parts, and not suffered to irritate the delicate vaginal membrane; it has been before mentioned, that with this view warm applications are suitable remedies at the com-

mencement of the disorder ; but when the discharge is in large quantity, or should there be hemorrhage, some cold astringent solution should be substituted, e. g. zinci sulph. or cupri sulph. in aquâ, vel decoct. gallæ, sive decoct. quercus. A pencil of the nitrate of silver has been used by some, introduced through the speculum, and applied to the ulcer itself, with the hope of destroying the diseased and specific ulceration, and of producing a healthy common sore underneath. We are not prepared to say this would be a useless application, where the disorder is confined to a small surface ; at the same time the consequent irritation is so great that a doubt may reasonably be entertained of its efficacy. The operation recommended by Lisfranc, which consists in cutting away the os and part of the cervix uteri, would be much more likely to remove the disease altogether ; but of this we cannot speak from experience.

The horizontal posture must be steadily preserved : the necessity of strict obedience in this particular cannot be too strongly enforced on the patient's mind. Where the strength is failing, and emaciation rapidly advancing, a more nutritious diet will be required, care being taken to avoid stimulation. A tonic remedial plan is also indicated ; the mineral acids are very agreeable, and serviceable also ; they may be combined with any bitter in-

fusion; the hydrochloric acid is peculiarly grateful to a weakened stomach, but it sometimes disturbs the bowels.

Other ulcerations of the neck of the womb are sometimes met with, such as the *syphilitic*, *scrofulous*, &c.; they should be treated in the same manner as though they were situated externally; constitutional means are universally required for the cure of these affections (vide p. 96). The cheesy-looking matter peculiar to scrofulous abscesses may be sometimes seen passing away with the vaginal discharge, when the glands of the os uteri are diseased.

CAULIFLOWER EXCRESCENCE OF THE OS UTERI.

This disease has received its designation in consequence of the tumour or excrescence bearing some resemblance to the vegetable of that name; it consists of a larger or smaller swelling, which possesses a considerable degree of firmness, made up of an indefinite number of projecting bodies, varying in size and figure, being in some parts rough, in others smooth. This tumour grows from the exterior of the os uteri, and has never yet been

discovered within the cavity of the womb. The enlargement in some is very rapid, in others slow; the difference depending partly upon the constitution of the patient, but principally upon the condition of the vagina, whether it be relaxed or firm; and hence the cause is explained why the disease extends so much more rapidly in married women, especially if they have borne many children; the vagina having been much and often relaxed, readily yields to the pressure of the tumour, and affords no resistance to its increase.

This morbid growth is covered over by a thin membrane, which secretes a limpid watery fluid, the quantity of which necessarily depends upon the size of the tumour, as it is poured out from the whole of its surface; whenever, therefore, the discharge is copious, it may be inferred, even before an examination is made, that extensive disease exists: at its commencement the watery secretion is so trifling that there is little more than the ordinary moisture of the parts of generation; as the tumour gets larger there will be an increased discharge, until at length the patient suffers inconvenience, and is obliged to wear a napkin; but as no pain is experienced, she has no idea that she is labouring under disease: at length the constitutional powers begin to decline, the countenance becomes sallow, and great weakness supervenes, or perhaps she is

alarmed by the sudden irruption of a large quantity of blood: this hemorrhage may occur spontaneously, or probably be brought on by exercise, or by some sudden concussion of the body; the bleeding is apt to be renewed by very slight causes, and then the powers of the system are speedily reduced. Sir C. Clarke remarks, that fatal syncope has been known to follow one of these hemorrhagic attacks: œdema is a very common attendant on the latter stages of the disease, the patient being carried off by dropsical effusions into some of the cavities of the body, and thus may be said to have been destroyed by the remote *effects* of her original disease. In the post-mortem inspection of those who have died from cauliflower excrescence, no distinct swelling has been perceived, but a mere flocculent-looking mass projecting from the os uteri.

The immediate cause which gives rise to the disease is unknown; it appears to be a vascular, and in fact an arterial tumour: the supposition of Sir C. Clarke seems so plausible, that the author takes the liberty to transcribe it:

“Hitherto it has not been ascertained what circumstances produce in the parts a disposition to take on the formation of this disease. It might be conjectured, that an injury inflicted upon the os uteri in labour, either by the head of the child, or

by violent attempts made to dilate it, might become an exciting cause; but many examples are to be met with, in which such injury has been done to the os uteri, and no such disease has followed. Married women who have never been pregnant, nay, single women, are liable to the complaint, in whom no violence can have been offered to the os uteri.

“It cannot be traced to any syphilitic cause. The common prostitutes of this metropolis are by no means more liable to it than any similar number of women in different stations of life. The disease arises as often in the strong and robust as in the weak; in persons who live in the country, as in those who inhabit large towns; in those whose situation in life obliges them to labour, as well as in those who, from their rank in society, sometimes consider themselves privileged to be useless members of it.

“No period of life, after the age of twenty, seems to be exempt from the disease. The author has known it fatal at the age of twenty; and he has met with the disease at different periods of life up to old age. The complaint may arise, perhaps, before the woman has reached her twentieth year, but no such case has occurred in the experience of the author.

“It has been observed above, that arterial blood escapes from the tumour when injured; indeed the tumour appears to be made up of a congeries of blood-vessels, and these blood-vessels are arteries; the infinitely small branches of these vessels, terminating upon the surface of the tumour, exhale in the most abundant manner an aqueous fluid.

“Perhaps some small arteries near the os uteri may undergo that morbid dilatation of their coats which is analogous to aneurism in larger trunks, and thus the disease may be produced. Something similar to this takes place in the arterial or blood-red nævus, but here the surface being covered by cutis and cuticle, no moisture of the part is met with; but if the surface of such a nævus should be injured, arterial blood escapes.

“May such a state of blood-vessels exist at the time of birth, remain concealed in early life from the very small quantity of blood which circulates in the organs of generation at this age, and be developed at that period at which blood rushes with greater force and in greater quantity, to enlarge these organs, and in the female to render them fit for the performance of new duties?

“It may be that the increased circulation which

is present at puberty, may not be sufficient to elicit the phenomena of the complaint; the stimulus of marriage may be required in some, whilst in others, the further development of the organs in pregnancy or the exertions of labour may be necessary to call forth the morbid symptoms of such hitherto dormant disease."

The vaginal examination of these patients should be conducted with great gentleness, as the tumour would be broken down if any violence were employed, and the hemorrhage thereby greatly increased.

Prognosis.

When called upon for an opinion, it must always be unfavorable as regards life; but there are circumstances to be taken into the account with regard to its probable duration. The favorable signs are: First, the health not being impaired. Secondly, the tumour being small, occupying a small portion of the os uteri: the discharge, which is in proportion to the extent of surface from whence it flows, will here be much less; again, the blood-vessels are smaller, and therefore hemorrhage will be much less profuse. Thirdly, a firm and contracted state of the vagina, the presence of which tends greatly to retard the

growth of the tumour. Fourthly, the female being unmarried. Whatever determines blood to the part will more or less cause an increase of the swelling, as it is entirely composed of arteries. Moreover, repeated coitus will relax the parietes of the vagina, and thus a double disadvantage is effected, for there not only will be an increased flow to the tumour, but a diminution of resistance on the part of the vagina; if, then, the patient be unmarried, the chance of life being prolonged is much greater.

The unfavorable signs are the reverse of these: namely, the constitution giving way, the tumour occupying the whole extent of the os uteri, the discharge profuse, the vagina relaxed; and, lastly, the female being married. There may also be pregnancy combined with this affection; and then, from the greatly increased capacity of the uterine arteries during that state, the tumour rapidly increases in size. If an individual suffering from cauliflower excrescence should prove with child, and the practitioner have no opportunity of examining before labour comes on, he would probably at first mistake the case for one of placental presentation, in consequence of the profuseness of the hemorrhage, for the blood then passes away in most alarming and dangerous quantities.

Treatment of Cauliflower Excrescence.

If the treatment of this disease be commenced sufficiently early, the woman's life may be greatly prolonged; and not only so, but may be rendered tolerably comfortable, as the complaint throughout its whole progress is attended with a very inconsiderable degree of pain. The want of success is in most cases to be attributed to delay on the part of the sufferer, in not applying for advice until the most favorable period has passed over. The nature of this excrescence must be borne in mind, namely, that it is a morbid growth or enlargement of blood-vessels. The action of these vessels is capable of being excited by anything which increases the force of the general circulation, and on the contrary may be diminished by any causes which depress the heart's action. The first indication is obviously to moderate vascular action generally, and by necessary consequence to lessen the size and the activity of the vessels forming the tumour; for this purpose ten or twelve ounces of blood at the least may be drawn from the arm, provided the constitution be healthy and the pulse beat with force. Should the strength be reduced, and the system unable to bear this general abstraction of blood, it must be removed locally, either by cupping the loins or leeching the vulva, groins, or perineum. This

treatment, however, is only proper in the early stages of disease; a very different plan is requisite where it has existed for a long time, and has already produced its debilitating and exhausting effects on the system.

Upon bloodletting judiciously employed, and where necessary occasionally repeated, great reliance is to be placed, not only for retarding the growth of the tumour, but for a time at least diminishing the size thereof. A tonic and contracted condition of the vagina has been enumerated as one of the favorable symptoms, the pressure or resistance of which would prevent a sudden increase of the morbid excrescence; and hence arises a second indication, to preserve the tone of the vagina, or to restore it when it is relaxed. For the fulfilment of this indication the assiduous employment of cold is well calculated, nothing will be more likely to effect the object. A bladder containing ice should be laid over the uterine region; injections of iced water into the vagina may be used at the same time; a common straight syringe containing about four ounces is the best instrument for this purpose, the nurse being particularly cautioned not to introduce it more than one inch beyond the os externum. There is an objection to the long curved tube syringe (so serviceable on many other occasions) on this account, that as the tumour is easily broken

down by slight pressure, a degree of injury might be inflicted by the extremity of that tube sufficient to induce alarming hemorrhage. Perhaps it would be better in all cases for the medical man in the first instance to perform this operation himself, that the attendant may see the proper mode of proceeding. It is almost needless to state that all stimuli, whether topical or general, would of necessity greatly interfere with the remedies; perfect quietude must be enjoined, and everything likely to excite the system, whether physical or mental, is to be studiously guarded against. It is a well-known fact, that even whilst the body is in a state of quiescence, the circulation is greatly disturbed by powerful emotions of the mind. Confinement to the couch is absolutely indispensable, that the influence of gravity may not have an unfavorable effect by producing an enlargement of the swelling, by allowing the vessels to become distended with blood. As so little pain or even inconvenience is felt by the patient, it will be right that the nature of her case be explained to her, so far as regards the necessity of the constantly recumbent position, otherwise she might imagine that she was subjected to an unnecessarily severe regimen, in which case an indiscreet deviation from the rules laid down would be a very probable result.

A soluble state of the bowel should be main-

tained : this is exceedingly important ; first, because a constipated condition would have a directly injurious effect on the parts in its neighbourhood ; and secondly, strong muscular straining efforts, for the purpose of expelling hardened fæces, would be very likely to break away portions of the excrescence, and thereby produce effusions of blood. On the other hand, if diarrhœa supervenes, it should be immediately restrained, as its weakening effects are highly prejudicial ; the diet must be simple and unstimulating ; fish, poultry, and the animal jellies, form an appropriate and not unpleasant bill of fare ; fermented drinks and spirituous liquors are not to be allowed.

It may be useful for us shortly to recapitulate the several means to be employed in the early stages. First, the strict maintenance of the recumbent posture ; secondly, venesection or topical bleeding occasionally repeated ; thirdly, the application of cold ; fourthly, the employment of mild laxatives ; and lastly, the use of a spare diet.

The treatment of the more advanced stages, which must now be considered, is necessarily very different ; the constitutional powers are here sinking, the patient is exhausted by a constant drain of red-coloured fluid, with occasional gushes of florid arterial blood ; various hysterical symptoms are

present; palpitation of the heart, a sense of choking, &c.; the countenance is pale, the lips livid; and add to these a general state of œdema, which sometimes comes on. The indications are twofold: first, to constrict the vessels of the tumour, and thereby to lessen the hemorrhage; secondly, to rally the declining energy of the constitution. For the accomplishment of the first, powerfully astringent injections are required, such as a solution of alum in water, decoction of galls, or of oak bark; the sulphates of copper or zinc may in some cases be advantageously substituted for alum. These applications will also have the effect of contracting the vagina, an object of no mean importance in the treatment of these affections.

The powers of the constitution are to be supported by tonic medicines, and by as nourishing a diet as the stomach will digest. The more solid food, such as mutton-chop, is to be preferred, if the patient can take it; if not, strong soups, or raw eggs beaten up with milk, or water with the addition of a little white wine, nutmeg, and sugar, may be substituted. Where exhaustion is rapidly advancing, it will be found necessary to administer small quantities of stimulants occasionally; great circumspection is however required in their employment, lest the circulation be too much excited, and the discharge thereby increased.

But little can be said respecting medicines, as they require to be frequently varied. Capsicum and quinine pills, given an hour before dinner, and the mineral acids continued at intervals throughout the day, are among the best that can be employed; if these should fail, other tonics must be tried: the muriated tincture of iron given in large doses will often prove very serviceable, the dose being repeated every three or four hours. We have lately had under our care a lady in whom the hemorrhage has been greatly restrained by the use of the tincture, though it is to be feared the case will eventually terminate fatally; it is nevertheless the duty of the medical man to relieve, and to prolong life, even where he knows he cannot preserve it. With this view it has been proposed that a ligature be tied around part of the tumour, not with the hope of permanent good, but for the purpose of restraining the flow of blood by closing the vessels. After the ligature has come away, the growth continues to increase as rapidly as before, and the female is soon in the same melancholy condition she was in prior to its use. The author has never met with a case in which he thought himself justified in recommending this plan; but as others have done so he submits it to the consideration of his readers, neither warmly recommending nor absolutely condemning a trial of the ligature.

A profuse hemorrhage sometimes destroys the patient in a very sudden manner by inducing mortal syncope; whilst in others, especially those whose constitutions were previously healthy, life is protracted to a longer period, the strength being more gradually worn out.

It has been previously observed, that if a patient afflicted with this disease should unfortunately become pregnant, and proceed to the full period of utero-gestation, the hemorrhage on the occurrence of labour would be most alarming. This is the natural result of the injury inflicted upon the vascular excrescence by the forcible pressure of the head of the child. If the tumour be large, it will be found to occupy the whole upper part of the vagina, and on examination, the first impression will probably be that it is a placental presentation. Care in examining will soon correct this mistake. It should be recollected, in the first place, that this excrescence grows from the exterior of the os uteri, and never within it. The author is fully aware (for he has experienced this difficulty in practice) that it is no easy matter to trace the swelling to its attachment. The finger, if such an expression may be allowed, becomes entangled in the various lobes of which the tumour is composed, and does not reach the upper part of the vagina, so that at first nothing is felt but a confused lobular mass of firm

texture, the os uteri and the child being beyond the reach of the finger.

In presentation of the placenta, there are certain points of contrast which deserve attention; if the medical man be called early in the labour, and from the hemorrhage which takes place this will be the case in all probability, he will easily discover the presenting substance to be altogether within the cavity of the womb, not at all interfering with the os uteri; the degree of its dilatation can be as readily ascertained as in a natural labour. Neither is any difficulty experienced in reaching the womb even in those cases where, from the violence of the uterine efforts, a portion of the placenta has been pushed through the os uteri into the vagina. The child may also very often be distinctly felt behind it, and whatever the mass be, it is at once found to be growing from within, and not on the outside of the uterus.

In cases of cauliflower excrescence, if the parturient action does not speedily expel the child, delivery must be effected by art; and if the tumour be large, it is better to lessen the bulk of the head by performing the operation of craniotomy, the forceps affording no chance of success. The author attended one case in which, even after the head had been lessened, he could not succeed in getting

away the child, and the woman died undelivered. In all cases life is placed in great jeopardy, in consequence of the immense quantity of blood necessarily lost. Should the female survive the shock of labour, the plan already detailed must be pursued with vigour, and all future intercourse with her husband prohibited.

CARCINOMA OF THE WOMB.

Of all the malignant disorganizations of the womb cancer is the most frequent. It sometimes attacks females in the very prime of life, but does not usually fully develop itself until after the catamenial secretion has ceased. The true scirrhus enlargement of the uterus, which ends in cancerous ulceration, very generally commences at the cervix : so often does this happen, that some authors have asserted that the genuine disease has never been known to begin in the body of the womb. The preparation from which the engraving, Plate IV., was taken, proves this opinion to be incorrect, for here the disease commenced high up, and extended to the cervix and os uteri. Sennertus, in his work *On the Diseases of Women*, was well aware of the fact just adverted to, for he thus writes, “ Etsi cancer etiam ipsius uteri *substantiæ* accidere potest,

tamen hoc rarius accidit, et vix tum satis cognoscitur, multo minus curatur: frequenter vero in cervice uteri generatur, quapropter hoc loco de eo agemus."

Before proceeding further, it is proper to observe, that in this treatise the term scirrhus is restricted to that hardened formation, which, if not checked in its progress, will inevitably end in ulcerated carcinoma. These morbid growths seldom acquire a very large size, and therefore differ very materially from that diseased mass into which the uterus is occasionally entirely converted, and in consequence of which it sometimes acquires a most enormous magnitude; this is what has sometimes been denominated "indolent scirrhus," but as it does not ulcerate, and appears to be closely allied in its nature to tubercle, this variety of disease will be described under the name of "tuberculated uterus."

Carcinoma of the uterus, it has been stated, generally begins at the cervix: it may commence by a firm, distinct, somewhat rounded swelling of one particular portion, or, as is most commonly the case, there is no distinct tumour, but a general enlargement and thickening of the part. The symptoms attending the beginning of the disease are slight: women seldom apply for relief until upon examination, you find such changes have already taken

place which could not have occurred in a short space of time: if a patient who has submitted to proper treatment be occasionally examined during the course of the disease, it will be observed that these changes are slow in their progress. The author has a preparation taken from the body of a woman who had been for six years a patient of the Dispensary in Aldersgate Street, and who had suffered from the symptoms of carcinoma during the whole of that protracted period.

Leucorrhœal discharge, in a greater or less degree, is present in the early stages of scirrhus uteri; this is sometimes streaked with blood, especially if much exercise be taken, or the female indulge in stimulating food and drink. In some cases free hemorrhage is induced, by which the mind becomes alarmed; uneasiness and a sense of weight are complained of, with darting pains about the hypogastrium, aching pains in the back and loins, extending forwards to the upper part of the thigh. If menstruation has not ceased, it becomes more profuse, and blood is mixed with the secretion: after this local evacuation, the tumour frequently remains for some time stationary, and the pain is to a certain extent lessened.

The stomach, as usual, sympathizes with the womb: there is a want of appetite, nausea, vomit-

ing, or heartburn, with other symptoms, which characterize dyspepsia : without care, these might be confounded with the original disease, we had almost said, in some instances without any blame being attributable to the medical adviser : many women are so exceedingly diffident, that even when consulting their physician, they will conceal every circumstance that would direct attention to the genital organs, although perhaps the object of their visit was to obtain relief for some uterine disease. It is necessary in these cases to put what our brethren of the legal profession denominate "leading questions." In every case of female disorder, particularly if occurring about, or soon after the "critical period," the state of the uterus should form a very principal object of enquiry, and if disease in that organ be suspected, the patient ought at once to be submitted to a vaginal examination.

Frequent inclination to void urine is another common symptom, sometimes only the result of the close sympathy which exists between the womb and bladder, at others it is produced by a disordered condition of the mucous membrane of the latter organ. The pain attending carcinoma is peculiar : it is described as of a lancinating or stabbing kind, and generally aggravated at periods. These are, however, uncertain, both as regards

their duration and the intervals between them. Should hemorrhage supervene during one of these attacks, the pain will be relieved.

If an examination be made before the ulceration be established, the os uteri will be felt more open than natural, and irregular in its figure: there are, nevertheless, in this respect, great variations; in some the top of the finger may be, without any difficulty, inserted within its lips, when the mouth of the organ will feel like a hard, cartilaginous ring, so great a change having been effected in the structure of the part. Where this substance is easily broken down by pressure, the finger on being withdrawn will be found to be covered with blood; this may always be considered an unfavorable sign, as it marks that kind of softening which immediately precedes ulceration. The rectum should be also examined, as somewhat similar symptoms are occasionally the result of a scirrhus affection of the bowel.

After ulceration has taken place, the most dreadful state of suffering awaits the unfortunate patient; the pains are agonizing, and there is but little remission; there are frequent hemorrhages in consequence of the destruction of the coats of the arteries; the discharge, instead of being mucous, becomes changed into a sort of purulent ichor, most irritating

to the surfaces over which it flows, and of an almost intolerably offensive smell: in a case of carcinoma, which the author was recently required to superintend, this peculiar fætor was discernible as soon as the street door was opened, although the house was of large size: this circumstance greatly adds to the annoyance, not only of the sufferer herself, but of all around her. The bladder in front, or the rectum behind, or both parts, are frequently laid open by the extension of the ulcerative process, and then, in addition to the symptoms already enumerated, the urine and fæces pass involuntarily: it need hardly be remarked that the fætor of the discharge is thereby necessarily increased, and it is rendered more irritating to the genital passages. It is scarcely possible to imagine a state of greater bodily torment than is experienced at this stage of carcinomatous disorder: these cases are rendered much more afflictive by the absolute certainty of there being no cure, and the great uncertainty of affording even a little relief: the attempt to procure ease is often fruitless.

This disease, so dreadful in itself, does not of necessity prevent impregnation: the author has in his museum a preparation which proves this fact. The particulars of the case, so far as he had an opportunity of personally witnessing them were the following: A poor woman in the city obtained a

letter from the Royal Maternity Charity, by one of whose midwives she was attended during her confinement; her labour, according to her own statement, was remarkably favorable. We were requested to visit her for the first time about three weeks after her delivery; she then complained of the most excruciating pain in the back; the discharge from the vagina was extremely fætid, the pulse rapid, though feeble; there was a fiery-red appearance of the tongue, which was dry, and the bowels were obstinately constipated. On examination, the vagina and rectum appeared to be nearly blocked up by a hardened mass, consisting of a number of tubercular feeling bodies, about the size of children's marbles, which I supposed were the glands of the bowel and vagina in a state of scirrhus enlargement; the os uteri could not be felt: the preparation explains the reason, it was destroyed by ulceration. The parts in the neighbourhood of the uterus were greatly indurated and thickened. On making pressure upon the abdomen, over the pubic region, great tenderness was complained of. This is by no means an uncommon occurrence; it arises from inflammation taking place in the peritoneal covering of the womb. Peritonitis of an extensive kind is often present, so that in inspecting the body after death great adhesions are observable as the result of such inflammation. The disease continued to advance, and the rectum was

involved in the ulceration : colliquative diarrhœa then came on, which opiates and astringents failed to restrain. The bladder also gave way, producing a frightful mass of disease ; the urine and fæces of course passed involuntarily, which increased the sufferings of the patient by adding to the fætor of the discharge. This individual lived for three weeks after we first saw her, and died six weeks after delivery ; the child was still living.

Before proceeding to the consideration of the appropriate treatment to be adopted in carcinoma uteri, the reader's attention is requested to Plate IV., representing cancer as contrasted with Plate III., exhibiting a specimen of the malignant ulcer. In cancer the whole uterus is enlarged, thickened, and indurated, and indeed all the adjoining parts become so likewise : the upper portion of the vagina is as completely scirrhus as the womb itself, rendering it difficult in the latter stages to determine where the vagina ends and the uterus begins. In one of the author's preparations the cellular membrane at the posterior part of the rectum is converted into a scirrhus mass, at least an inch in thickness.

No such appearances are observed in malignant ulcer (vide Plate III.) : there is the ulcer of greater or less extent in different persons, but beyond and

around it there is a healthy condition of parts. It is right to observe that the dimensions of the plates correspond with those of the original preparations from whence they were taken, and are therefore more valuable on that account, inasmuch as they show very correctly the changes that take place.

Treatment of Scirrhus Uteri.

Although there is no known cure for carcinoma of the womb, yet we believe many cases of threatened cancers might be averted had we the opportunity of attacking the first symptoms before the specific character has developed itself; for however our opinion may differ from those who consider cancer to be the mere result of common inflammatory action, still we again express our conviction, that in a multitude of instances, if not in all, inflammation, and that of a common kind, brings into action what might otherwise have lain dormant in the system: and further, that where proper attention has been paid to this previous condition of the womb, the development of cancer has been altogether prevented. The author distinctly remembers two cases where the symptoms already enumerated as indicating scirrhus were present: there was in each that stony hardness which in so remarkable a degree characterizes this

kind of tumour: nevertheless, both patients recovered perfectly, the hardened deposit being removed by absorption. One of these females was exceedingly reduced in consequence of repeated hemorrhage, to which she was subject at intervals for upwards of a twelvemonth: perhaps this loss of blood contributed in no slight degree to the perfection of the cure. The result of this case was very satisfactory; and the reflection that such may be the result should stimulate the practitioner to persevere in the use of all means that are likely to remove this formidable disease, as one instance of success will amply repay him for many failures in his endeavour to procure relief.

Cancer uteri very often, though not universally, commences between the forty-fifth and fiftieth year of a female's life, or at any rate makes but little progress prior to the cessation of menstruation; and hence, as before noticed, the necessity of making special enquiry into the state of the uterus at that period. The first symptoms are, as we have before stated, inflammatory; and therefore the first remedies must be antiphlogistic. Great discrimination is required in determining the extent to which this plan should be pursued: the condition of the uterus on the one hand, and of the system in general on the other, should be carefully investigated. The local inflammation is sometimes of a very de-

cided character, and the constitution in a vigorous and plethoric condition : and here the propriety of abstracting blood from the arm cannot be questioned. In other cases, and these constitute a considerable majority, general bleeding is improper : the application of leeches to the vulva or cupping-glasses to the loins should in its stead be recommended. It will generally be necessary to repeat the bleeding occasionally, at such intervals as the circumstances of the individual case may demand.

A moderately relaxed state of the bowels is to be constantly preserved, but violent purgatives are decidedly improper ; still, however, it is better to select those which produce a certain degree of watery discharge ; the object for which they are used not being simply to empty the bowels, but in a measure to lower the system also. Perfect quietude of body in the recumbent posture forms an essential part of the plan : the mind should likewise be preserved in as tranquil a condition as possible, as all powerful mental emotions have the effect of disturbing the circulation. In those whose constitutions have not been enfeebled, the aperient medicines may be employed for a week or ten days, or until the inflammation has been somewhat subdued ; a mild mercurial plan, similar to that already described as being required in chronic inflammation of the womb, should here be adopted (vide p. 86),

the same cautious superintendence being observed, lest the constitution be injured by its continuance. Food must be taken in sparing quantities, and of mild and unstimulating quality. From five to ten grains of the extract of hyoscyamus will often relieve irritability and procure sleep.

The proper local applications are those which encourage the mucous secretions from the vagina, namely, warm water, or a decoction of poppies or hemlock, and these injections should be employed at least four or five times every twenty-four hours, the patient using also a hip-bath every evening. In the very early stages of scirrhus, some females are liable to hemorrhages; and where the quantity of blood lost is considerable, pain is generally alleviated for a time; unless, therefore, it be excessive in degree, no attempt ought to be made to restrain it: but if this loss of blood should be sufficient to weaken the constitutional powers, the common treatment for the arrest of uterine hemorrhage may be had recourse to.

In the treatment of this affection, one grand object is to retard the ulcerative process; and as all local stimuli must have a tendency to hasten on this event, it becomes of the utmost consequence, if the patient be married, for her to have a separate bed from her husband. We have already stated that

the diet should be light, and in such quantities that the stomach be at no time rendered uneasy by distension. Where there is an acid state of stomach, no food having a tendency to pass into the acetous fermentation should be allowed: in many cases small portions of animal food, broths, jellies, &c., are preferable to vegetables. Alkaline remedies are also indicated; fifteen or twenty minims of liquor potassæ, with or without an aperient, may be administered twice or thrice in the day; or half a drachm of magnesia suspended in a glass of milk. If there be much thirst, and a regular action of the bowels, so that no laxative is required, relief will generally be obtained by making use of equal parts of lime-water and milk as a common beverage.

There is no disease for the cure of which a greater variety of medicines has been from time to time recommended. The vegetable kingdom has been explored by some, and conium, aconitum, sarsaparilla, &c. &c., have had their advocates: others have employed the various metals, and have been loud in their praises of the different preparations of iron, antimony, gold, arsenic, &c. All have, however, with very few exceptions, arrived at the same conclusion, namely, that there is no known specific remedy for cancer.

We must not omit to notice the opinion of a cer-

tain physician now living, with regard to this disease, that it may really be cured by a very simple method. According to his notion, nothing need be done except to direct the patient to live exclusively on vegetables and to drink distilled water. Absurd as this practice appears at first view, is it not likely that the total abstinence from stimulation, which the plan enforces, may be attended with advantage in the *very early stage*? but certainly not at every period, whether ulceration be present or not, as recommended by this author.

These, then, are the remedial means to be employed in scirrhus of the uterus; and we conclude our observations on the subject by imploring the reader not to imagine, because the disease is usually fatal, that therefore nothing can ever be effectually accomplished for the patient's relief. We confidently restate our conviction, that much may be effected *at the commencement*, not only in the way of palliation, but for the eventual arrest of its progress; the insurmountable difficulties so frequently met with being the result of delay, and this manifestly arising from the slight, and to the patient unimportant, symptoms which indicate its first and only curable stage.

Treatment of Ulcerated Carcinoma.

The patient's sufferings are greatly increased after ulceration has taken place: the discharge is increased in quantity and becomes highly offensive and irritating; the coats of the blood-vessels are destroyed, and hence there are large and repeated effusions of blood. The constitution is greatly impaired, partly, doubtless, from hemorrhage, and partly, probably, from absorption of morbid matter into the system; the countenance is sallow, the eyes sunken, the pulse quick and feeble; ulceration advances, and the bladder is opened; the urine then passes through the opening, and the factor of the discharge is increased; or the rectum may give way, and then there will be no control over the evacuation of fæces: before this takes place, there is generally difficulty in emptying the bowels, owing to the pressure of the surrounding thickened parts. In one case a difficulty of this kind was produced by the pressure of a number of enlarged and hardened glands situated along the course of the vagina. The inguinal glands frequently participate in the disease, so that the central parts of the patient become one mass of disease, and this of the most painful kind.

After ulceration has occurred, all hopes of cure must be abandoned; but every endeavour should be

exerted for the relief of the sufferer. Her state, however, is truly deplorable ; it frequently happens that the best directed and most judicious means fail to afford even temporary relief : the attempt must nevertheless be made.

At the head of the list of palliative measures, cleanliness may be placed. Frequent, almost constant, ablution of the parts is required, that the acrimonious and offensive discharges be not suffered to accumulate, and to become still more fætid : these applications must not be used very warm, lest the hemorrhage be increased ; in some cases it is necessary to employ them perfectly cold, that they may act as styptics to the bleeding vessels ; a little chloride of lime may be advantageously added to the liquid employed : the female will thereby be relieved, in part, from the annoyance caused by the offensive smell : solutions of the chloride should also be placed in different parts of the chamber. The bowels should be relieved by enemata rather than the exhibition of laxatives by the mouth. The sinking powers of the constitution must be upheld by a diet somewhat nutritious, but care should be exercised in this respect, that an unfavorable degree of over-excitement be not produced ; in general, no stimulating drink is allowable, although in some instances, where there is great exhaustion and debility, this rule may be departed from.

We have seen much benefit derived from the muriated tincture of iron combined with henbane, when there has been severe hemorrhage; of course the relief is but temporary, for as ulceration extends more blood-vessels will be opened, and a repetition of the bleeding follows of necessity. Something must also be attempted with the hope of moderating the agonizing pain, and nothing but opium will answer the purpose. It is useless to exhibit this remedy in the ordinary doses, as they will fail altogether to accomplish the desired object: the effect produced, and not the number of grains administered, must be our guide. The author has attended a case, in which from twenty to thirty grains of opium were taken daily without affording more than a very slight amount of relief; this large quantity did not produce sleep, and only in a trifling degree seemed to deaden the pain. Our usual plan is to prescribe a pill composed of two grains at bedtime, and a repetition of the dose in a few hours if necessary. In a case which occurred some months ago, ease was procured by adding a grain to the first dose, making it to consist of three grains, the second pill required no addition. As the disease proceeds, emaciation increases; and at length, though usually not until after several years of pain, death puts an end to the patient's sufferings. In the dissection of those who die from cancer of the uterus, it will often be found that the inflammation has extended to the neigh-

bouring parts: the surrounding intestines are frequently glued to the uterus by very tight adhesions; this took place to a great extent in the female from whom the uterus (Plate IV.) was taken, so that the womb could not be separated from these unnatural attachments without great difficulty.

The subject of carcinoma uteri, and especially its treatment, must not be dismissed without allusion to a very bold operation which has been performed on the continent, and more recently in our own country by Dr. Blundell, namely, the extirpation of the entire womb. Dr. B. operated upon four females, and the following are the results of these operations, as detailed by himself: "Having in fact and inference laid a foundation for this formidable undertaking, and feeling persuaded that in some few cases at least life might now and then be saved by extirpation, I determined to take the operation into my own hands on some proper occasion, and the more readily, as it seemed rather to require obstetrical dexterity than that of the general surgeon; and I have now operated in four cases, and in four cases only, of which the results are before the profession. Of these cases, one was followed by recovery beyond my hopes, though the woman is since dead, and three proved fatal, one in the course of two or three hours after the operation, one in the course of four or five hours, and one not until nine and thirty

hours had elapsed after the uterus had been taken away. Of the three failures, one was in a manner hopeless from the first, though under all circumstances, and at the express and urgent desire of the patient, it seemed but right to give the only remaining chance; one, namely, that in which the patient survived for nine and thirty hours, was a failure of an encouraging kind, for the case during a good part of the time manifested many hopeful symptoms; and one, namely, the last in which I operated, and with more dexterity and readiness than in the preceding cases, considerably obscured my expectations, never very sanguine, by proving fatal within some four or five hours after the extirpation was completed, although previous to the operation it appeared, both to my medical friends and myself, that all the apparent circumstances were auspicious, and highly conducive to success."

Such are the results of Dr. Blundell's operations: the cases are at present too few to warrant any very decided opinion with regard to the propriety of extirpating the uterus. In the present state of our knowledge, the author would hesitate in recommending its performance. Sir Astley Cooper in his admirable lectures on surgery used to say, "Never recommend an operation to another that you would not have performed on yourselves under similar circumstances." If this rule were applied to uterine

extirpation, there is great probability that it would be seldom if ever had recourse to. The mode of operating is fully described in the case of Mrs. Moulden, which was published in the *Lancet* soon after the operation was performed. There is not the slightest chance of success if the uterus be adherent to the surrounding parts, or if the vagina be much involved in the disease ; in other words, unless the operation be undertaken at an early period.

FUNGOID TUMOUR OF THE WOMB.

The womb is sometimes the seat of that peculiar affection called “fungus hæmatodes ;” the disease puts on the same characteristic appearances as when it attacks other parts of the body ; the tumour is soft, but elastic, and composed of an indefinite number of cells, the size of which varies greatly : these cells contain serum mixed with the red particles of the blood. The symptoms denoting its early formation are very slight, and are those which are common to most of the other affections of the uterus. The female complains of uneasiness rather than actual pain in the region of the womb, and there is sometimes, but not always, a leucorrhœal discharge from the vagina. After a time the organ enlarges, so as to be distinctly felt through the

parietes of the abdomen ; this tumour is recognized by the two characteristics already described, namely, softness and elasticity. Hemorrhage is present in the early stage, though not in amount sufficient to alarm the patient.

On examination, the os and cervix uteri will be found converted into a soft tumour ; if ulceration has taken place, its extent may be detected by the finger ; when, however, this has occurred, large quantities of blood are effused, accompanied with the fætid sanious discharge so commonly observed in other cases of fungus hæmatodes. The ulceration may occur in different situations ; sometimes, as in carcinoma, it begins at the cervix, extending forwards to the bladder, and backwards to the rectum : cases are recorded where the fundus uteri has given way, the fungus projecting from its external surface into the abdominal cavity, producing inflammation and adhesion of the intestines ; or it may adhere to the parietes of the belly, which yield, and the fungus makes its appearance at the external wound. The patient is sooner or later worn out, the constitutional symptoms being similar to those of cancer.

The treatment of this disease is palliative only, and consists in attending to the peculiar symptoms which may arise in the progress of the complaint.

The treatment recommended in ulcerated carcinoma should be employed in fungus hæmatodes.

POLYPUS OF THE WOMB.

Tumours of a polypoid kind are not confined to the uterus, they are frequently seen to grow from other parts of the body : uterine polypus, the disease now under consideration, is not often met with in early life, although very young girls have occasionally been the subjects of this affection. From different parts of the uterus this growth arises, namely, from the fundus at its upper part, and from the cervix just within the mouth of the womb, or it may be attached to the lips of the uterus exterior to its cavity. The texture of polypi varies ; they are sometimes met with, firm and unyielding, as hard as cartilage, at other times they are so soft and lacerable that they are easily broken away by the finger, and in this manner a cure has been in some few instances effected. Some polypi, again, are of a white colour, others of a deep brown ; they are usually attached by a single peduncle, which may either be large and broad, or small and narrow, or they may adhere to the womb by several roots. They are generally distinct substances growing from the lining membrane of the uterus ; at other times, according

to Dr. Denman, they are partly composed of the substance of the organ itself, "which shoots out so as to be intermingled with that of the polypus, or to form a covering over it." A number of little vessels, principally veins, may be observed ramifying in the membrane which covers the surface of the tumour, and from these considerable hemorrhage sometimes takes place. No nerves have been discovered entering into its composition, and hence insensibility is its peculiar characteristic. The size of different polypi varies exceedingly: they are at first very small, so as not to be felt, gradually increasing, if nothing be done for their cure, until they acquire the size of a child's head: these large polypi are very appropriately designated by the term "scandalous," by Dr. Blundell, as they cannot possibly occur without gross neglect on the part of the medical man. In most cases there is no other uterine disease present, but it should be remembered there may be a complication with some other affection, such as scirrhus, which is fatal in its nature: where there is no such combination, prolapsus or inversion may occur as a consequence of polypus.

The cause of polypus has been supposed by some to be referrible to some accidental injury inflicted upon the womb, either during labour or otherwise. This opinion is not well founded; it seems rather to

be a spontaneous disease, often occurring in persons previously healthy, and sometimes in unmarried women. The growth of the tumour is very generally slow, many months frequently elapsing before the attention of the practitioner is directed towards it, and indeed patients may die of other diseases without any suspicion having been entertained of the existence of polypus, provided its size be small.

The symptoms attendant on this form of uterine affection are the following: in the first place there is a greater or less degree of mucous discharge, often, although at irregular intervals, tinged with blood; occasionally the hemorrhage is profuse, and this is a fortunate circumstance for the female, as it will lead to a more careful investigation of the true nature of the disease. Whilst the discharge is trifling, the patient is probably supposed to be suffering from profuse menstruation, from which, however, it may be distinguished by the irregularity of the flow. Where the blood is retained for a time in the cavity of the womb or vagina, decomposition takes place, it acquires an intolerably offensive smell, and renders the discharge of a dark colour. We must not suppose from this circumstance, that the disease is malignant; the entire absence of pain will soon prove that such is not the case. Sir Charles Clarke observes, that coagula of blood are occasionally voided of a ring-like form, the peculiar shape

produced by a certain quantity of blood adhering to the surface of the tumour, there coagulating, and at length sliding off, and passing from the os externum. The author has never noticed these ring-like coagula in his own practice. An uncomfortable sense of weight and bearing-down are early experienced, which will necessarily increase as the growth enlarges. In very large polypi the bladder and rectum suffer from pressure; the uterus descends in consequence of its increased weight, and from the stretched state of the broad ligaments, pain will then be felt in the groins. The usual sympathetic affection of the stomach is here also present, and various dyspeptic symptoms manifest themselves; there may be merely loss of appetite, or nausea and vomiting.

When polypi grow from the fundus uteri, they gradually increase in size, the womb enlarging and its mouth opening until the tumour passes through and projects into the vagina. If no remedy be employed it continues to grow, and the tumour passes through the vulva, where it may be *seen* lying between the thighs, and then it belongs to the "scandalous" kind. Sir Charles Clarke relates a case of polypus which happened in an unmarried female, which completely filled the cavity of the pelvis: this was of the hard species. After the peduncle was cut through by a ligature, the mass could only be removed by the introduction of the midwifery forceps. Before the tumour has passed into the

vagina, or at any rate before it occupies the lower part of the uterus, a vaginal examination will not detect it; but when situated low down, a mistake ought not to be committed, as the characters of the disease are very distinctive: polypus is a firm, round, smooth, and insensible tumour, perfectly unattached to the parietes of the vagina; the finger can therefore be passed around it, and from the insensibility of the mass, pressure, or even a scratch with the finger-nail, gives no pain; but, although the substance itself is void of sensibility, yet it should be remembered that the part from whence it grows, namely, the uterus, is sensible, and therefore unless the examination be conducted with gentleness, pain will be complained of, and this circumstance might deceive an inexperienced practitioner. If the body of the polypus be small, the finger may be passed beyond it, and the stalk or peduncle distinctly felt proceeding from within, but not adhering to, the os uteri. Should the stalk be fixed to the cervix uteri, the finger can only be passed on one side, so that in this case it is only semicircled by the os uteri; whilst in the former variety, where the attachment is at the fundus, the substance appears completely encircled by it. Where, on the other hand, the tumour grows from the exterior of the uterus, from the outside of one of its lips, the whole mass will be easily felt to be situated in the vagina, having no connexion with the uterine cavity.

The diagnosis in this disease is unattended with difficulty ; indeed, it is scarcely possible to confound it with any other affection, with, probably, the exception of chronic inversion and cauliflower excrescence. We speak doubtingly, as such mistakes are not very likely to occur ; from the former, polypus may be distinguished by its insensibility, and by an attentive enquiry into the history of its early stages : it differs from the latter in the absence of watery discharge, by its being a single tumour attached to a stem, which in most cases passes through the os uteri ; the cauliflower excrescence on the other hand is composed of an indefinite number of lobules of various sizes, connected to the *outside* of the mouth of the womb, and often extending over a great portion of its surface.

There is, however, one variety of disease which, without great care, might be mistaken for polypus, as it bears a very close resemblance to it in many particulars. This tumour is insensible, grows from the interior of the uterus, and passes through the os uteri ; it is therefore encircled by it, but no distinct peduncle or stalk is discoverable. The *surface* of this growth differs from polypus ; instead of being smooth and round, it is rough and irregular. Hemorrhage is here present, with many other symptoms of polypus. This form of complaint is fatal, and appears to arise from a diseased state of the organ generally, which is usually considerably en-

larged: relief has been in some few instances obtained by removing portions of the mass from time to time, by means of a ligature; the effect is but temporary, as the tumour is reproduced in a short space of time, so that sooner or later the patient sinks under its influence. Whenever, therefore, an operation is decided upon, the mind of the female and her friends should be prepared for such a result.

The existence of polypus, if it be of small size, does not interfere with the processes of conception and gestation: the parturient efforts of the uterus have sometimes detached and expelled the growth, after the birth of the child and placenta. In some few instances a spontaneous cure has been effected by the contractions of the organ, even in the unimpregnated state.

The prognosis in true polypus may always be favorable, provided an operation be performed in due time. It cannot however be doubted that many females have died from the flooding consequent on this disease, its true nature never having been detected; the case has been considered to be one of common menorrhagia, or perhaps some malignant affection of the uterus, and therefore the proper treatment has not been carried into effect; under these circumstances, the hemorrhage has continued, until from its frequent repetition the strength of the

individual has been exhausted, and at length her sufferings terminated by death. Such an occurrence is much to be deplored ; for by attention to the symptoms, and careful vaginal examinations, the true character of the complaint is without difficulty ascertained, and by a very simple, bloodless, and even painless operation, the disease is removed and permanently eradicated, there being no disposition in the uterus to renew it. A patient was sent to the author from the country some few years since, who was said to be labouring under malignant, and consequently fatal uterine affection. The case was considered hopeless, but it was thought advisable that she should consult a London physician-accoucheur before she died. The symptoms she complained of were hemorrhage, emaciation, prostration of strength, &c. On examination, a very small polypus was discovered proceeding through the os uteri ; a ligature was applied around it : and instead of this lady returning to the country to die, we had the satisfaction to send her home perfectly cured in the space of ten days. Had the morbid growth not been discovered, death must soon have ensued, as her powers were rapidly failing.

Treatment of Polypus Uteri.

The only method to effect a cure consists in the removal of the polypus, and various means have been recommended for effecting this object, namely,

cauterization, excision, tearing it away by the fingers, and the ligature: the author invariably uses the ligature, believing it to be by far the more preferable method, and therefore will not take up the time of the reader in describing the others, except in simply stating that small polypi of the softer kind (the texture of which will not bear the pressure of the ligature) have occasionally been removed by the thumb and finger, an interesting example of which is recorded in Dr. Gooch's work on the *Diseases of Women*.

Removal of the Polypus by Ligature.

The best instrument that can be employed for this purpose is the double canula of Levret, as improved by the late Dr. Gooch. This instrument consists essentially of two straight silver tubes, about eight inches in length: there is a third piece composed of a double tube at its lower, and two rings at its upper extremity, and these are joined together by a long thin silver rod, or rather wire; the tubes and rings are just large enough to admit the two other long tubes already described, and thus to form the whole into one piece. Various kinds of ligature are employed by different practitioners: the best in our own judgment is gold twist of a convenient thickness, easily to be procured at any gold-lace warehouse. The advantages of this material are, that it possesses firmness, and also a sufficient degree of flexi-

bility to allow of its application without difficulty ; moreover, it is not affected by the moisture of the part. The aim of the operator is to pass this ligature around the stem of the polypus ; and, therefore, in the absence of any particularly urgent symptom, it is better to wait, and make no attempt for this purpose until the finger can be passed beyond the body of the tumour and the peduncle easily reached. There will, in this case, be comparatively little danger of including the os uteri in the loop of the ligature, as considerable dilatation will by that time have taken place : if threatening symptoms should make their appearance before the descent of the polypus thus far, an attempt at removal would be justifiable, even if it should be found on examination that no portion had passed through the mouth of the womb.

Before commencing the operation the instrument is to be prepared in the following manner : one end of the ligature should be passed up one of the long tubes and down the other, so that the centre of the ligature may extend from the upper part of one tube to the upper part of the other, and thus the loop is easily formed. In our own practice we use the third piece also, carrying the ligature through the corresponding rings and tubes, leaving the gold twist of sufficient length to allow of the tubes being freely moved about prior to their junction. The female having been placed on her left side, in the usual obstetric position, the two canulæ already

armed with the ligature, are to be carried up the vagina as high as that portion of the stem of the polypus about to be tied: one of the tubes is to be retained in that position whilst the other is removed, and carefully carried around the stalk until it again meets with its fellow. By this manipulation it is clear that the peduncle must be completely encircled by a loop of the ligature: the third part of the instrument is now to be slipped over the long tubes, by means of which they will be kept in apposition, and the ends of the ligature are to be tightened and carried through the shoulders situated at the extremity of this third piece, where they must be very firmly secured. It is a point of immense importance to avoid including any portion of the uterus within the noose of the ligature. Where there is inversion combined with polypus, this accident might happen, especially if the stem be large; and although it does not follow of necessity that this would be attended with fatal results, yet it is certain that it would produce a vastly increased amount of suffering. The polypus, we have already stated, is destitute of sensibility, and, consequently, if nothing besides this morbid growth be encircled by the ligature there will be no uneasiness complained of; whereas, if a portion of the womb be included great pain will be immediately felt: the presence or absence of pain then will at once determine whether the ligature be properly applied or not, and it must be slackened, tightened, or alto-

gether removed, as circumstances may require. Where the stem is growing from the fundus uteri great difficulty would be experienced were it necessary to apply the ligature around the upper part close to its attachment with the uterus; no such necessity however exists: it has been found by experience, that if the body of the polypus be passed, and the lower part of the stalk tied, the cure will be perfect, as the whole of the upper part will moulder away.

Before using the ligature the rectum and bladder should be thoroughly emptied; a dose of castor oil or a common enema may be employed. One great advantage gained by this preparatory proceeding is, that the woman is enabled to remain quiet for some hours afterwards. If there be restlessness, or inability to sleep, an opiate may be administered: no other medicine is required, unless there be a feverish excitement of the vascular system, when a moderately antiphlogistic plan is to be enforced. The instrument must be left in the vagina, the female kept in bed, and cautioned to avoid unnecessary movement of the body; and when about to alter her position, she should be directed to steady the instrument by holding it in her hand, lest some of the soft parts be injured. The time occupied in the performance of the operation varies according to the size of the peduncle or stalk: the ligature requires to be tightened daily; where the stem is

small it will be cut through in a few days, if of large size, a fortnight may elapse before this effect is produced, whilst in some few cases of soft polypus, the first application of the ligature has immediately separated it. The mass sometimes retains its original size and firmness after the removal of the instrument; at others it will be found in a great measure to have dwindled away: the author has a preparation which presents the appearance of a flabby membranous bag, whereas, before the use of the ligature, the tumour was hard and tense, about the size of a small pear. Whether hard or soft, they may, in general, easily be removed from the vagina by the hand, or by the forceps if required, as in Sir Charles Clarke's case. During the process of cure, there is often a very offensive discharge, disagreeable to the patient and her friends also: this may be regarded as a favorable symptom, as it indicates incipient putrefaction, and thereby affords a proof that the ligature has been sufficiently tightened. To destroy this fætor, a weak solution of chloride of lime or cold decoction of chamomile may be thrown up the vagina twice or thrice daily: if the female feels alarmed in consequence of the smell, its cause ought to be explained to her. After the extraction of the polypus, the vagina should be well washed out with a solution of the sulphate of zinc; these applications not to be discontinued so long as there are any discharges, whether of mucus or blood: these seldom

remain for any length of time, and frequently there are none at all, so that the patient is speedily restored to her wonted health and strength. Where the disease has not been discovered, and the operation performed sufficiently early, the constitution suffers from the long continuance of the drain, and a course of tonic medicine becomes necessary. In conclusion, we would just observe that polypi frequently grow from the surface of the vaginal membrane, not being in any way connected to the womb ; they appear to be of the same nature as those already described, and require for their cure the same operation. If they are attached to the upper part of the canal, care is required not to pass the ligature around the projecting os uteri.

TUBERCULATED UTERUS.

This singular disease was described by Dr. W. Hunter, and called by him the fleshy tubercle of the womb : it is in its nature perfectly innocent, and when of small size, does not materially interfere with the health, or even the comfort of the woman. We have had several patients under our care who merely complained of a slight degree of " bearing down," increased on the least exertion : this growth has been termed fleshy, in consequence of being soft, like the substance of the womb from whence it grows ; as the disease advances it becomes hard,

like cartilage, and frequently there are deposits of bone within its substance. The remarkable peculiarity of this kind of tumour consists in this, that notwithstanding its existence for many years, still it will remain without ulceration, or suppuration.— These tubercles vary in size and in number: sometimes there is but one, at others many; some no larger than a walnut, whilst others weigh several pounds. Their situation also differs: sometimes they grow from the exterior of the uterus and project into the abdominal cavity, and if the female be of spare make, can be felt through its parietes; or they may adhere to the interior of the uterus; whilst in many instances the uterus itself enlarges, and is converted into a complete tubercle of considerable size, with or without smaller masses growing from the outer surface. In Plate V. is delineated a beautiful specimen of this disease; the body of the uterus itself is greatly enlarged, forming a large tubercle, and there are no less than six smaller ones proceeding from its exterior. The dotted line *a* points to the ovary. Plate VI. represents a single tubercle of the uterus; the entire organ has here undergone a change: the preparation from which the drawing was taken measures seven inches across from the entrance of one Fallopian tube to the other, and is five inches in length: its structure is partly fleshy, but principally cartilaginous, with portions of bone deposited within it. These tumours are not vascular, or at least do not

admit red blood, neither can the finest injection be made to enter their substance; and, perhaps, this low degree of organization explains the reason why they do not undergo those changes to which many other enlargements are disposed.

The growth of uterine tubercle is exceedingly slow, for in those unfortunate cases where the appropriate treatment fails to arrest its progress, many months or years will elapse before much inconvenience is experienced from its size. The symptoms present at the commencement of the disease are very slight: there is a certain degree of uneasiness, for it can scarcely be designated pain in the back, accompanied with a sense of bearing down, and often an increased vaginal discharge; the menstrual secretion is not necessarily suppressed, nor is conception prevented by the existence of an external tubercle: as the tumour increases in magnitude, various parts are pressed upon and much inconvenience thereby experienced; the bladder and rectum, from their situation, must necessarily suffer.

In the early stages there is a frequent inclination to pass urine, the female being unable to retain it but for a short period: when the uterus has acquired a very large size, the pressure is sufficient to produce complete suppression, and it will then be necessary to introduce the catheter (or to teach the

patient how to use it herself) twice at least every twenty-four hours. The rectum is very similarly affected; there is, at first, tenesmus, with frequent evacuations, and in the more advanced stages inability to void the fæces, in consequence of the pressure to which the bowel is exposed. Inflammation often supervenes at this period, and may prove destructive to life, by extending over the whole peritoneal surface. In two cases under the author's care very alarming hemorrhage came on, which was repeated at uncertain intervals, in consequence of which the patients became greatly debilitated. In one of these cases the cavity of the pelvis is nearly blocked up by a large tuberculated womb: some months ago the effusion of blood occurred so frequently that her life appeared to be in peril: by the careful use of the means usually employed for the arrest of uterine hemorrhage the bleeding was arrested, and the last time she was seen by the author she walked to the Fore-street Dispensary, a distance of about three quarters of a mile.

Tubercular enlargement of the uterus may be mistaken for disease of the ovarium, or pregnancy. From the former the diagnosis is not difficult, as the swelling if examined through the abdominal coverings is firm and immoveable: in ovarian dropsy there is generally a sort of elastic feel, and not unfrequently, if the cyst be of large size, a distinct sense of fluctuation; a vaginal examination will at

once solve the doubt; the womb will be felt to be enlarged, and much heavier than in its normal condition, and if the tubercle be situated near the lower part of the organ, an irregularity of surface is easily distinguishable; if pressure be made upon this part pain is sometimes though not uniformly experienced. The disease is not very likely to be confounded with pregnancy, for at its commencement there are none of the usual attendants on uterogestation, namely, amenorrhœa, morning sickness, &c., nor are any changes observable in the breast, or in the areola of the nipple: in the more advanced stages, where the tumour is large enough to be felt by the hand, the absence of motion will convince the practitioner that there exists no *foetus in utero*. Great pain is sometimes the result of pressure upon the nerves of the pelvis, and œdema of the lower limbs is occasioned in consequence of interruption to the circulation through the returning veins and lymphatics. From an attentive consideration of the symptoms described as characterizing this disease, it will be seen that the effects are purely mechanical, being the obvious results of pressure. But it should be recollected, that these effects are in some cases such as to render the woman's life very miserable; and in others, so much disturbance of function is produced, that her very existence is in imminent danger; the treatment, therefore, must be prompt and energetic, that, on the one hand, the tumour be prevented from increasing, and on the

other that the absorbents may be stimulated to increased action.

Treatment of Tuberculated Uterus.

There is good reason for believing that fleshy tubercle of the uterus is the result of slow inflammation, for if the progress of the disease be closely watched, it will always be found that there are occasional attacks of pain, though probably trifling in degree. Should this be the case, ten or twelve leeches may be applied to the vulva with great advantage, their reapplication to be determined by circumstances. If the constitutional symptoms should require the loss of blood generally, venesection should also be performed, not to supersede the use of leeches, but as an addition to the plan. Constipation may be obviated by the daily use of an enema, or the administration of any ordinary aperient. Afterwards small doses of mercury, combined with conium or hyoscyamus, should be given, until slight ptyalism has been induced. By a steady perseverance in this plan, aided by confinement to the recumbent position, great relief will be obtained; for although in most cases the tubercle is not absorbed, vascular action will be diminished, and the further advance of disease prevented. It is advisable to give an anodyne at night if there be much restlessness. The author has reason to believe he has in several instances checked the growth

of tubercle by this method of treatment. Within the last fortnight he has had occasion to prescribe for a lady, who applied to him six years ago in consequence of uterine disturbance: on examination, a tubercle, about the size of a pullet's egg, was discovered at the posterior part of the neck of the womb; by adopting the plan recommended, the uneasiness soon subsided, and since that period the tubercle has remained stationary: there does not appear to be the slightest increase in size. It has been before stated, that where the urine is suppressed, the catheter must be employed: some difficulty is experienced in performing this operation if the tumour be large: a long elastic gum catheter is the most convenient instrument for this purpose; its introduction is assisted by pushing the uterus upwards and backwards, and thus taking off pressure from the meatus urinarius: if the hollow of the sacrum be filled up, and the female unable to pass the contents of the bowel, it will be necessary to pass the finger up the rectum and raise the tumour before using the enema apparatus. Acute inflammation of the peritoneum is occasionally set up: this is easily recognized by the character of the pain, conjoined with other symptoms which indicate peritonitis: the same powerfully antiphlogistic measures as are required in an ordinary case of this affection, must be adopted without delay, or life will be speedily destroyed.

LEUCORRHŒA.

Fluor albus, fluor muliebris, profluvium vaginale,
“weakness,” “the whites.”

THERE are numerous mucous lacunæ dispersed throughout the lining membrane of the vagina, the secretion from which keeps the part moist in a state of health: a disordered action occurring in these lacunæ necessarily produces an alteration in such secretion, sometimes merely augmenting its quantity, at others changing its quality so completely, that instead of being a bland, mild, and lubricating fluid, it becomes highly irritating, and produces pain and inflammation on the surfaces exposed to its influence; to this disease of the vaginal membrane the name of leucorrhœa, fluor albus, &c., has been applied. But in popular parlance the term “weakness,” or “whites,” has a far more extended signification; every unnatural mucous, or purulent discharge from the genitals, having received that appellation. When, therefore, a female applies for medical advice, and complains of being subject to “weakness,” the practitioner ought not to consider that, as a matter of course, the vagina is the original seat of disease; in many instances the discharge proceeds

from the glands of the os uteri, or it may flow from the lining membrane of the womb, as this is but a continuation of the vaginal membrane: and even where the fluor albus proceeds from this latter situation (the vagina) it may still arise as a consequence of disorder of some distant part, and therefore is justly to be regarded as a symptom, rather than an original affection. It is to be feared that the difficulty oftentimes experienced in the treatment of these discharges arises from want of a right discrimination of the various causes which produce them, and to a brief enumeration of them the attention will now be directed.

Leucorrhœa from Inflammation of the Vagina.

—The first effect of inflammation of a secreting organ is to increase the quantity of its secretion, and, secondly, to alter its quality, unless, however, the inflammatory action be excessive in degree, when it puts a stop to secretion altogether. When fluor albus arises from an inflamed condition of membrane, the female complains of a smarting pain “up the passage,” increased if she attempt to move about: there is also painful micturition, arising from extension of irritation to the meatus urinarius. In robust habits there may be some general constitutional disturbance. In these cases the discharge is not to be considered *the disease*, but as an effort of nature to relieve the morbid condition of the ves-

sels; and therefore, instead of attempting to restrain it, applications should be used for the purpose of increasing the flow, as it is seldom in large quantity; warm water frequently injected into the vagina, with the occasional use of purgatives, seldom fail to subdue inflammation, and thereby cure the fluor albus arising from this cause. Where there are signs of general febrile disturbance, it will be right to remove a little blood from the arm, but this will not often be required:

Leucorrhœa from Relaxation and Debility.—It is generally believed by women that debility and exhaustion alone produce leucorrhœa, and hence its popular term “weakness.” Although it cannot be doubted that profuse vaginal discharges are usually soon followed by general as well as local debility, yet the notion that they never originate from the opposite state has produced incalculable mischief, as it often leads the patient herself to take those remedies, and to use those applications, which are highly improper where there is even a tendency to inflammation, and much more so if that state has actually supervened. The symptoms which denote general and local debility are too well known to require any lengthened detail. The patient’s appearance will at once indicate it; her countenance being sallow, her eyes sunk, and surrounded by a dark arcola, the pulse quick and feeble, the appetite bad, palpitation

of the heart, depression of spirits, with many other marks of exhaustion. Leucorrhœa seldom continues for any length of time without disturbing the functions of the stomach, and inducing dyspeptic symptoms. There is very generally a failing appetite, and often a constipated state of the bowels. If there be a tendency to consumption in the constitution, nothing is more likely to bring it into action than extreme weakness produced by the long continuance of a neglected leucorrhœa. Again, dyspepsia of long standing will produce vaginal discharge as one of its symptoms, so that in many cases it is very difficult to determine between cause and effect. In this case, however, the diagnosis is unimportant, as the treatment, to be successful, must be adapted both to the local and the constitutional disorder: the fluor albus, for example, may have induced general disorder, and this general disorder reacting upon its original cause, may have increased the local flow by inducing a still greater degree of relaxation in the membrane of the vagina. Common sense would direct the use of means for the relief of both cause and effect under such circumstances.

The treatment then of leucorrhœa, arising from relaxation and debility, consists in restoring the tone of the constitution generally, and in restraining the immoderate vaginal secretion. It will be vain to attempt to fulfil the one indication without

making use of means to accomplish the other; a great error in the management of these cases has arisen from the opinion that it is merely a local affection, and that therefore nothing but topical applications are required. It should be recollected that, after all, this discharge is nothing but a symptom, indicative sometimes of disordered action in the part itself, frequently, however, the result of a generally disturbed state of the system at large, and very often, as has been before observed, one of the many unpleasant effects of derangement of the digestive organs. A torpid condition of the stomach and liver will frequently be found amongst the symptoms attendant upon obstinate and protracted leucorrhœa, and to these organs, therefore, the remedies ought to be directed. Alterative doses of mercury in its mildest form (*hydrarg. cum cretâ*) should be exhibited every night, and those medicines administered in the day which are likely to improve and invigorate the tone of the stomach, and for this purpose the vegetable bitters are admirably adapted. Where there is a generally weakened state of constitution without any particular affection of the digestive organs, the author has found the tinct. ferri muriatis to be of great service, given in doses varying from fifteen to twenty minims three times a day in a wine glassful of camphor mixture. Should there be a tendency to constipation, the mildest laxative, or a simple warm-

water enema should be used daily. It is of no little importance that the diet of the female should be attended to ; everything that is nourishing and easy of digestion should be allowed, with a moderate portion of some stimulating drink : port wine is in most cases serviceable, as it possesses a certain degree of astringency, and may, consequently, have a beneficial effect on the local affection. Nothing has a greater tendency to keep up leucorrhœal discharge than exercise disproportioned to the strength of the patient. It will be found in many instances that the flow is much lessened during the night, and it is almost invariably greatly increased if much exertion be made use of : this fact has led the author to recommend his patients to place themselves in the recumbent position during a part of the day ; and where there is languid digestion, the hour immediately following dinner may be advantageously selected for the purpose. He thinks that inattention to these particulars, namely, diet and regulation of exercise, has been in some instances the cause why the discharge has not been cured ; and he is borne out in this opinion by the fact that he has succeeded in restoring patients to health after other medical men, who had laid down no rules as to these matters, had utterly failed. The local applications should be those of the astringent kind. Injections of sulphate of zinc, or common alum in solution are the most appropriate.

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